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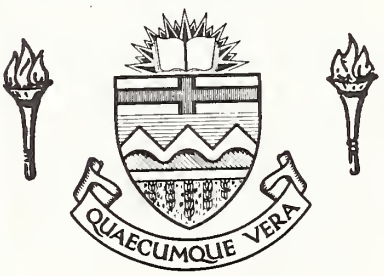

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CENSUS OF THE EXACT SCIENCES IN SANSKRIT

SERIES A, VOLUME 1

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PREFACE

The author in this volume and in its hoped for successors summarizes the material relating to jyotiḥśāstra that he has been collecting since 1955 in various libraries in America, Europe, and India. He is indebted to the authorities of these institutions, and in particular to those of Widener Library at Harvard; the David E. Smith Collection at Columbia; the Library of the University of Pennsylvania; the Library of the University of Chicago; the British Museum and the India Office Library in London; the Bodleian Library; the Bibliothèque Nationale in Paris; the Staatsbibliothek in Berlin; the Universitätsbibliothek in Leipzig; the Biblioteca Nazionale in Firenze; the Bhandarkar Oriental Research Institute, the Deccan College, and the Ānandāśrama in Poona; the Asiatic Society and the University of Bombay in Bombay; the Oriental Institute in Baroda; the Gujarat Vidyā Sabhā, the L.D. Institute, and the B.J. Institute in Ahmadabad; the Scindia Oriental Research Institute in Ujjain; the Viśveśvarānanda Vedic Research Institute in Hoshiarpur; the Sarasvatī Bhavana in Benares; the Vīra Pustakālaya and Kaisar Shamsher Rana in Kathmandu; the Asiatic Society and Sanskrit College in Calcutta; the Oriental Institute in Mysore; the Government Oriental Manuscripts Library in Madras; and the Sarasvati Mahal Library in Tanjore. He must also express his profound gratitude to the American Philosophical Society for a grant that enabled him to visit India in the summer of 1965 and to investigate many manuscript collections at that time. But the individual to whom this cataloguer owes most is India's foremost student of Sanskrit manuscripts, Professor V. Raghavan of the University of Madras, who most generously made available his numerous handwritten catalogues of Indian and European collections. May this work prove as useful to the students of jyotiḥśāstra as Raghavan's *New Catalogus Catalogorum* is to the students of Sanskrit literature in general.

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INTRODUCTION

This is the first installment of a projected *Census of the Exact Sciences in Sanskrit* (hereafter to be referred to as *CESS*), which will provide all available bibliographical information concerning works in *jyotiḥśāstra* and related fields and biographical information concerning their authors. *Jyotiḥśāstra* is traditionally divided into three *skandhas* or branches: *horâ* or genethlialogy and other forms of horoscopic astrology, *gaṇita* or mathematics and mathematical astronomy, and *saṃhitâ* or divination. The related fields to which attention is paid in *CESS* are cosmology and geography (largely of the Jainas) and those aspects of *dharmaśāstra* that involve the determination of the proper times for the performance of ritual acts. It is intended to include all of the works and all of the authors in these subjects that can be identified.

CESS will consist of two series: Series A will contain articles on the authors arranged in the order of the Sanskrit alphabet, and Series B articles on the books (mainly in Sanskrit, though some non-Sanskritic Indian material is included) arranged in the same manner. A concluding volume will contain tables of astronomical parameters, genealogical stemmata of authors and scribes, and indices of scribes and of proper names. The core of *CESS* is formed by the entries in the catalogues listed on pp. 26-32 of this volume, supplemented by printed texts (noted in the articles on the relevant authors and books) and the entries in the bibliography on pp. 4-25 of this volume. As new catalogues of manuscripts, editions of texts, and items for the bibliography are constantly appearing, and as material unwittingly omitted from the present lists will undoubtedly turn up, supplements will be included in the subsequent volumes of *CESS*. The index in the final volume will, of course, facilitate reference to these supplements.

The article on each author will first give as much information as is available on his date, ancestry, locale, religious affiliation, and social position; it will then list his works relevant to jyotiḥśāstra and, under each work, list its commentators, its manuscripts and editions, and any discussions of it; finally, there will be given a table of its contents and those passages in it which inform us about the author. In the case of dharmaśāstra works dealing with the relationship of astrology to proper human behavior and in the case of texts (mainly Jaina) on cosmology the references are not intended to be complete; it is felt that it is sufficient, by and large, to draw the reader's attention to this extensive material that both depends upon and has influenced jyotiḥśāstra proper. The articles on books will either consist of a simple reference to the author, if he is known (he can then be looked up in Series A); or, if he is not known, there will be a full discussion of the date and locale of the work, a table of its contents, and a list of manuscripts, editions, and studies. All references to items in the bibliography, it should be noted, are abbreviated to the name of the author (the first and middle names are represented by initials) followed by the year of publication in square brackets; if the author published more than one item in any particular year, the first in the bibliography will be denoted by an *a* following the date, the second by a *b*, and so on. If a bibliographical item is to be found in one of the supplementary lists, the series letter and volume number (e.g., A 3) in which that supplementary list is found will be prefixed to the code.

CESS A 1 contains in their initial form the list of abbreviations of journals and series, the bibliography, the list of manuscript catalogues, and the articles concerning authors whose names begin with *a, ā, i, ī, u, ū, ṛ, ḷ, e, ai, o,* and *au*. It is hoped that Series A can be completed in four more volumes, and Series B in a total of another five or six volumes. There will be an interval of approximately one year between the appearances of successive volumes.

There have been two previous attempts to collect information regarding Indian astronomers and astrologers (S. Dvivedin [1892] and S. B. Dikshit [1896]), and one to gather the references to manuscripts (S. N. Sen [1966]). However, none of these approaches the coverage of the present work or, it is to be hoped, its accuracy and usefulness. That usefulness should lie in providing a preliminary exploration and organization of the vast mass of Sanskrit and Sanskrit-influenced literature devoted to the exact sciences (including astronomy, mathematics, astrology, and divination), and in detailing under each item not only what preceding work has been done, but what manuscript material is known to be available for future investigations. It is hoped that the publication of *CESS* will stimulate future editions and studies of jyotiḥśāstra.

ABBREVIATIONS OF JOURNALS AND SERIALS

AA—Artibus Asiae
AAWB—Abhandlungen der Akademie der Wissenschaften zu Berlin
ABORI—Annals of the Bhandarkar Oriental Research Institute
AE—Ancient Egypt
AGM—Abhandlungen zur Geschichte der Mathematik
AHES—Archive for History of Exact Sciences
AIHS—Archives internationales d'histoire des sciences
AJ—Astronomisches Jahrbuch
A(K)GWG—Abhandlungen der (Königlich) Gesellschaft der Wissenschaften zu Göttingen
ALS—Adyar Library Series
AMM—American Mathematical Monthly
AMP—Archiv der Mathematik und Physik
AMSHU—Abhandlungen aus dem Mathematischen Seminar der Hamburgischen Universität
AO—Acta Orientalia
AP—Aryan Path
AR—Asiatic(k) Researches (continues as *JAS Bengal*)
ARASI—Annual Report of the Archaeological Survey of India
Archeion
Arch Or—Archiv Orientalní
Arch SS—Archivio di storia della scienza
A Rel.—Archiv für Religionswissenschaft
AS—Annals of Science
ASINIS—Archaeological Survey of India, New Imperial Series
ASVOI—Annals of the Sri Venkatesvara Research Institute (continued as *JSVOI*)
AUS—Allahabad University Studies
BARB—Bulletin de l'Académie royale de Belgique
BB—Bullettino di bibliografia di storia delle scienze matematiche e fisiche
BCMS—Bulletin of the Calcutta Mathematical Society
BGOMLMadras—Bulletin of the Government Oriental Manuscripts Library Madras
BDCRI—Bulletin of the Deccan College Research Institute
Bhāratī
Bhāratīya Vidyā
BI—Bibliotheca Indica
BIFAO—Bulletin de l'Institut Français d'Archéologie Orientale
BISR—Beiträge zur indischen Sprachwissenschaft und Religionsgeschichte
BM—Bibliotheca Mathematica
BMAUA—Bulletin of the Mathematical Association of the University of Allahabad
BMPG—Bulletin of the Museum and Picture Gallery, Baroda
BNISI—Bulletin of the National Institute of Sciences of India
BO—Bibliotheca Orientalis
BOS—Bonner Orientalistische Studien
Brahmavidyā
BSM—Bulletin de sciences mathématiques
BSMF—Bulletin de la Société Mathématique de France
BSO(A)S—Bulletin of the School of Oriental (and African) Studies
BSS—Benares Sanskrit Series
BVKSGWL—Berichte über die Verhandlungen der Königlich Sächsischen Gesellschaft der Wissenschaften zu Leipzig
Centaurus
CHM—Cahiers d'histoire mondiale
CII—Corpus Inscriptionum Indicarum
COJ—Calcutta Oriental Journal
CR—Calcutta Review
CRHSAS—Comptes rendus hebdomadaires des séances de l'Académie des Sciences
CSRSGR—Commentationes Societatis Regiae Scientiarum Gottingensis Recentiores
DCMS—Deccan College Monograph Series
EI—Epigraphia Indica
ER—Edinburgh Review
EUA—Enciclopedia Universale dell'Arte
EW—East and West
Ganita
GOS—Gaekwad Oriental Series
GOS (Bombay)—Government Oriental Series
Grundriss—Grundriss der Indo-Arischen Philologie und Altertumskunde
Hindū Viśvavidyālaya Nepāla Rājya Saṃskṛta Granthamālā
HOS—Harvard Oriental Series
HR—Hindustan Review
HRel—History of Religion
HSS—Haridas Sanskrit Series
IA—Indian Antiquary
IC—Indian Culture
IHQ—Indian Historical Quarterly
IIJ—Indo-Iranian Journal
IIQF—Indo-Iranische Quellen und Forschungen
IJHS—Indian Journal of the History of Science
IMI—Istoriko-matematicheskie issledoviia
IPSS—Indian Positive Sciences Series
IS—Indische Studien
Isis
Islam C—Islamic Culture
ISPP—Indian Studies Past and Present
IT—Indian Thought
JA—Journal Asiatique
JAHRS—Journal of the Andhra Historical Research Society
Jaina Ant.—Jaina Antiquary
JAOS—Journal of the American Oriental Society
JARS—Journal of the Assam Research Society
JAS—Journal of the Asiatic Society
JAS Bengal—Journal of the Asiatic Society of Bengal (continues as *J(R)ASB/L* and *J(R)ASB/S*)
JAS Bombay—Journal of the Asiatic Society of Bombay (continues as *JBBRAS*)
JAU—Journal of the Annamalai University
JBAA—Journal of the British Astronomical Association
JBBRAS—Journal of the Bombay Branch of the Royal Asiatic Society (continues as *JAS Bombay*)
JB(O)RS—Journal of the Bihar (and Orissa) Research Society
JDHC—Journal of Deccan History and Culture
JDL/UC—Journal of the Department of Letters, University of Calcutta
JDMV—Jahresbericht der Deutschen Mathematiker-Vereinigung
JDS/UC—Journal of the Department of Science, University of Calcutta
JGJRI—Journal of the Ganganatha Jha Research Institute
JGRS—Journal of the Gujarat Research Society
JIBS—Journal of Indian and Buddhist Studies
JIH—Journal of Indian History
JIMS—Journal of the Indian Mathematical Society
JIMS/NQ—Journal of the Indian Mathematical Society. Notes and Questions
JISOA—Journal of the Indian Society of Oriental Art
JJG—Jīvarāma Jaina Granthamālā
JKHRS—The Journal of the Kalinga Historical Research Society
JMNP—Jurnal Ministerstva Narodnogo Prosveščeniia
JMU—Half-yearly Journal of the Mysore University
JOI Baroda—Journal of the Oriental Institute, Baroda
JOR Madras—Journal of Oriental Research, Madras
JOS—Journal of Oriental Studies (Swadhyaya Mandal)
JPUHS—Journal of the Punjab University Historical Society
JRAS—Journal of the Royal Asiatic Society
J(R)ASB/L—Journal of the (Royal) Asiatic Society of Bengal, Letters (continues as *JAS*)
J(R)ASB/S—Journal of the (Royal) Asiatic Society of Bengal, Science (continues as *JAS*)
JS—Journal des savants

JSGVC—Jahresbericht der Schlesische Gesellschaft für Vaterländische Cultur
JSVOI—Journal of the Sri Venkatesvara Oriental Institute
JTSML—Journal of the Tanjore Sarasvati Mahal Library
JUB—Journal of the University of Bombay
JUG—Journal of the University of Gauhati
JUP—Journal of the University of Poona
JUPHS—Journal of the Uttar Pradesh Historical Society (formerly *Journal of the United Provinces Historical Society*)
JVSSM—Jaina Vividha Sāhitya Śāstra Mālā
JWCI—Journal of the Warburg and Courtauld Institutes
JWH—Journal of World History
KSS—Kāśi Sanskrit Series
LG—Laghu Granthamālā
Lucifer
Madras GOS—Madras Government Oriental Series
MAIB—Mémoires présentés par divers savants à l'Académie des Inscriptions et Belles-Lettres de l'Institut de France
MARS—Mémoires de l'Académie Royale des Sciences. Depuis 1666 jusqu'à 1699
MASB—Memoirs of the Asiatic Society of Bengal
MASI—Memoirs of the Archaeological Survey of India
Mathematica
Mathesis
MCBE—Monatliche Correspondenz zur Beförderung der Erd- und Himmels-kunde
Medhā. Journal of the Sanskrit University, Rāyapura
MGMNT—Mitteilungen zur Geschichte der Medizin, der Naturwissenschaften, und der Technik
MHARS—Mémoires. Histoire de l'Académie Royale des Sciences
MM—Master Maṇimālā
MPAWB—Monatsberichte der Prussischen Akademie der Wissenschaften zu Berlin
MR—Modern Review
MS—The Mathematics Student
MSS—Mysore Sanskrit Series
NAM—Nouvelles annales de mathématiques
NIA—New Indian Antiquary
NNMRP—The Nava-Nālandā-Mahāvihāra Publication
NO—Novy Orient
NPP—Nāgari Pracāriṇī Patrikā
NUJ—Nagpur University Journal
OE—Oriens Extremus
OH—Our Heritage
OHRJ—Orissa Historical Research Journal
OLZ—Orientalistische Literaturzeitung
OM—Österreichische Mittelschule
Osiris
PAIOC—Proceedings of the All-India Oriental Congress
The Pandit
The Pandit (Jaipur)
PAOS—Proceedings of the American Oriental Society
PAPS—Proceedings of the American Philosophical Society
PBMS—Proceedings of the Benares Mathematical Society
PhM—Philosophical Magazine
PIHC—Proceedings of the Indian History Congress
PKG—Prācyavidyāsaṃśodhanālayakannaḍagranthamālā
PM—Periodico di matematiche
PO—Poona Orientalist
POS—Poona Oriental Series
PRASB—Proceedings of the Royal Asiatic Society of Bengal
PTRSL—Philosophical Transactions of the Royal Society of London
PWSBT—Princess of Wales Sarasvatī Bhavana Texts (continues as *SBG*)
QJMS—Quarterly Journal of the Mythic Society
QST—Quellen und Studien zur Geschichte der Mathematik, Astronomie und Physik
RGSPA—Revue générale des sciences pures et appliquées
ROC—Revue de l'orient chrétien
RPG—Rājasthāna Purātana Granthamālā
RQS—Revue des questions scientifiques
RSMEP—Rajwade Samshodhan Mandal's English Publications
RSS—Ravivarma Sanskrit Series
Saṃśodhaka
Śāstrīya Granthamālā Nāgapūra
SAWB—Sitzungsberichte der Akademie der Wissenschaften zu Berlin
SBAW—Sitzungsberichte der Bayerischen Akademie der Wissenschaften
SBG—Sarasvatī Bhavana Granthamālā
SBH—Sacred Books of the Hindus
SBS—Sarasvatī Bhavana Studies
SBW—Studien der Bibliothek Warburg (continues as *SWI*)
SC—Science and Culture
Science
Scientia
SG—Sampūrṇānanda Granthamālā
SGVPB—Shree Gauthami Vidya Peeth Bulletin
SHAW—Sitzungsberichte der Heidelberger Akademie der Wissenschaften
SIFI—Studi italiani di filologia indo-iranica
SJS—Singhi Jain Series
SKBGW—Sitzungsberichte der Königl. Böhmischen Gesellschaft der Wissenschaften
SM—Scripta Mathematica
SPAW—Sitzungsberichte der Prussischen Akademie der Wissenschaften zu Berlin
SRS—Satya Rishi Series
SWI—Studies of the Warburg Institute
TAPS—Transactions of the American Philosophical Society
TLSM—Transactions of the Literary Society of Madras
TRAS—Transactions of the Royal Asiatic Society
TRSE—Transactions of the Royal Society of Edinburgh
TSS—Trivandrum Sanskrit Series
UB—Uttara Bharati
VGM—Virasevāmandira Grantha Mālā
VIJ—Vishveshvaranand Indological Journal
VIPS—Vishveshvaranand Indological Paper Series
VIS—Vishveshvaranand Indological Series
VNGZ—Viertaljahrsschrift der Naturforschenden Gesellschaft in Zürich
VSM—Vidarbha Saṃśodhana Maṇḍala
VSS—Vizianagram Sanskrit Series
WZKM—Wiener Zeitschrift für die Kunde des Morgenlandes
YASB—Yearbook of the Asiatic Society of Bengal
ZDMG—Zeitschrift der Deutschen Morgenländischen Gesellschaft
ZII—Zeitschrift für Indologie und Iranistik
ZMNU—Zeitschrift für mathematischen und naturwissenschaftlichen Unterricht
ZMP—Zeitschrift für Mathematik und Physik

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(DSC) Devasūri Collection.
(KC) Kīrtimuni Collection.
(KhC) Kheḍa Collection.
(LDC) Lalbhai Dalpatbhai Collection.
(MPC) Munirāja Śrī Puṇyavijayajī Collection.
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CENSUS OF THE EXACT SCIENCES IN SANSKRIT

AKALAÑKA (*fl.* seventh, eighth, or ninth century)

A Digambara Jaina from Śravaṇa Belgoḷa under the Rāṣṭrakūṭas, Akalaṅka was primarily a logician. A summary of the various views which have been put forth concerning his parentage and date can be found in NCC, vol. 1, pp. 2-3. Among his works is a commentary (*Tattvārthavārtikālaṅkāra* or *Rājavārtika*) on the *Tattvārthādhigamasūtra* of Umāsvāti (*fl.* first century A.D.?). For manuscripts and editions, see Velankar p. 156 and NCC, vol. 1, p. 4.

AKETASIṂHA (*ca.* 1250?)

An astrologer quoted in the *Jyotiṣatattvakaumudī*, a work written by the son of Śrīnivāsa Miśra—perhaps the Śrīnivāsa who flourished in Mysore in the second half of the thirteenth century. Aketasiṃha's name occurs at the end of a list which includes Śrīpati (*fl. ca.* 1040), Bhāskara (b. 1114), and Śrīnivāsa himself.

AGASTYA

A work on divination from birds, *Pañcapakṣiśāstra,* is ascribed to Agastya. The manuscripts are:

Tanjore D 11489 (BL 11041). 8ff. Telugu.
Tanjore D 11490 (BL 11042). 6ff. Telugu.
Tanjore D 11491 (BL 12143 c). Grantha. Incomplete.
Tanjore D 11492 (BL 11043). 9ff. Telugu. Incomplete.

It was edited as the *Pañcapakṣīpraśna* by Śivarāma Pati, Cuttack 1906, with an Oriyā translation (BM 14053.b.39.[2.]). The *Pañcapakṣī* with bhāṣāṭīkā was also published at Bombay; there are two copies—B 1710 and B 1738—in the Mysore GOL. There exist Tamil versions (NCC, vol. 1, p. 17).

Another astrological text ascribed to Agastya is one of the many works bearing the title *Agastyasaṃhitā;* the manuscripts are:

Goṇḍal 1. 2ff. Saṃ. 1910 = A.D. 1853. Incomplete.
Rādh 33. (See CC, vol. 1, p. 2).

The colophon at the first section of the *Varṣaphaṇi* in GOML Madras D 13491 reads: ity agastyasaṃhitāyāṃ pariveṣakramaḥ. And an *Agastyapaṭala* is quoted in the *Kautukacintāmaṇi* of Rāma, as is Agastya by Śivarāja (*fl.* 1400-1480) in his *Jyotirnibandha.*

AGNIKEŚA (=*AGNIVEŚA*?) (before *ca.* 750)

This author is quoted by Kalyāṇavarman (*Sārāvalī* 54, 11-12). He should be dated then before *ca.* 750 A.D. If the reading Agniveśa is correct, then he is the famous pupil of Ātreya and authority in Āyurveda.

AÑGIRAS (see Bṛhaspati).

One of the traditional eighteen founders of jyotiḥśāstra, Aṅgiras is mentioned by Nārada (*Nāradasaṃhitā* 1, 2); see also *Kaśyapa* and *Parāśara* in S. Dvivedin [1892] 1. And he is used by Śivarāja in his *Jyotirnibandha.* Therefore, a work ascribed to him must have existed by the fourteenth century or somewhat earlier. But the school of Aṅgiras was already familiar to Ṛṣiputra. The *Aṅgiraḥsiddhānta* in Kavīndrācārya 871 is probably fictitious. There is also a *Bārhaspatyasaṃhitā* ascribed to Āṅgiras (Bṛhaspati, of course, is the son of Aṅgiras). Manuscripts:

Śṛṅgeri Maṭha 206 (a) (see NCC, vol. 2, p. 20).

And it is possible that Ibn al-Nadīm's A.n.k.w (*Fihrist,* p. 271 Flügel) should be read A.n.k.r, representing Aṅgiraḥ or Āṅgiraḥ.

ACALA MIŚRA (*fl. ca.* 1790 ?)

Two works are ascribed to Acala: an *Acalasiddhāntasaṅgraha* in

Oudh IX (1877) VIII 1. 82 pp. Copied in A.D. 1796. Property of Sahatāvan Lāla of Sītāpur Zila,

and a *Jyotirvi(da?) śṛṅgāra* (=*Jyotirvicchṛṅgāra* ?) in

PL, Buhler IV E 140. Property of Tribhuvana Lālajī of Vaḍhavāṇa.

ACYUTA (before *ca.* 1650 ?)

A Kerala Brāhmaṇa of unknown date who authored a vast compilation known as the *Devakerala;* alternate titles are *Keralanāḍī, Candrakalānāḍī,* and *Candranāḍī.* The work is supposed to be based on one by Bhārgava. The following manuscripts are known:

GOML Madras R 853 (a). Ff. 3-81. Copied Monday 6 Aśvina Śaka 1812 = *ca.* 20 October 1890. Telugu. Purchased in 1913/14 from E. R. Kṛṣṇamācārya of Kalyāṇapuram, who obtained it from Daśaratharāma Śāstrin of Mylapore. *(Devakerala)*

GOML Madras R 3322. Ff. 1-154v. Copied in 1920/21 from a manuscript belonging to S. Ayyāśāstrigal, Nallapalli, Chennamangalam, Cochin. Grantha. Incomplete. *(Candranāḍī)*

Adyar (2 MSS.) = Adyar Index 2839 =
- *a*) Adyar Cat 8 J 17. 267ff. Karṇāṭakī. Incomplete. *(Devakerala)*
- *b*) Adyar Cat 22 K 1. 822ff. Grantha. Incomplete. (ends with Kamalāṃśavṛṣabhalagna) *(Devakerala)*

Adyar = Adyar Index 1516 = Adyar Cat. 8 J 21. 291ff. Telugu. Incomplete (ends with Kāntāṃśavṛścikalagna) *(Keralanāḍī)*

GOML Madras D 13775. 195 pp. Telugu. Incomplete. *(Devakerala)*

GOML Madras D 13776. 335 pp. Telugu. Incomplete (continues GOML Madras D 13775). *(Devakerala)*

GOML Madras D 13777. 19 pp. Telugu. Incomplete (first Khaṇḍa only). *(Devakerala)*

GOML Madras D 13778. 78 pp. Telugu. Incomplete. *(Devakerala)*

GOML Madras D 13779. 60 pp. Telugu. Incomplete. *(Devakerala)*

GOML Madras. R 4056. Ff. 8-133. Grantha and Tamil. Incomplete. Presented in 1921/22 by Veṅkudīkṣitar

Avargaḷ of Naṅgavaram, Kulittalai taluk, Madura. *(Devakerala)*
Kerala 7574 (=2470). 3000 granthas. Telugu. Incomplete. *(Devakerala)*
Kerala 7575 (=2483 A). 1400 granthas. Telugu. Incomplete. *(Devakerala)*
Mysore (1922) B 59. 163ff. *(Devakerala)*
Mysore (1922) B 60. 248ff. *(Candranāḍī)*
Mysore (1922) B 61. 246ff. *(Candranāḍī)*
Mysore (1922) B 62-63. 258ff. *(Devakerala)*
Oppert I 1229. Property of Vaṅkīpuram Śrīnivāsācāryār of Tiruvallūr, Chingleput, Madras *(Candranāḍī)*
Oppert I 3558. 200 pp. Property of Narasiṃhapuram Rāghavācāryār of Kumbhaghoṇam, Tanjore *(Candranāḍī)*
Oppert II 5189. Property of Piccudīkṣitar of Akhilāṇḍapuram, Tanjore *(Candranāḍī)*
PUL II 3560. 50ff. Grantha. Incomplete. *(Devakerala)*

The *Devakerala* has been edited in two volumes by T. S. Ranganatha Josyar, *Madras GOS* 93, 140, 153, Madras 1952-56. The first volume contains the text according to GOML Madras R 853 (a) collated with R 4056; the second volume, issued in two parts, contains that according to GOML Madras D 13775 and D 13776. The first volume definitely ascribes the work to Acyuta. The first verses are:

vāsudevaṃ paraṃ brahma nārāyaṇam anāmayam/
lakṣmīnāthaṃ namaskṛtya vakṣye 'ham devakeralam//
kerale viṣaye kaścid acyuto nāma bhūsuraḥ/
bṛhaspatiṃ samuddiśya saṃcakre tapa uttamam//

And the last is:

deśe 'nekasurālayaiḥ parivṛte vidvadbhir āsevite
jātaḥ keralake ca tatra tapasā saṃpūjya śaktiṃ parām/
cakre candrakaleti viśrutam idaṃ tv aṃśair namāyair yutaṃ
śrīmān acyutasaṃjñito dvijavaro jyotirvidām prītaye//

The second volume, however, is ascribed to one Veṅkaṭeśa by the opening verse:

abhivandya matañgākhyaṃ śrīmadveṅkaṭanāyakam/
kāśyapo veṅkaṭeśo 'haṃ phalaṃ vakṣyāmi bhūbhujām//

This makes one suspect that, despite the number of manuscripts and the edition which call the second volume the work of Acyuta, it is in fact a continuation by another hand (Veṅkaṭeśa's) of Acyuta's *Devakerala*. This Veṅkaṭeśa is perhaps Veṅkaṭeśa Bhūgola *(q.v.)*, who belonged to the Kāśyapagotra; he flourished in the middle of the seventeenth century.

ACYUTA (*fl.* 1505/1534)

Acyuta of the Gautamagotra, known as Bhaṭṭa and Mihirācārya, was the son of Sāgara or Sāgaracandra (not the commentator on Naracandra), and the grandson of Vāmana. The location of his manuscripts indicates that he was a Bengālī. He is the author of two works:

1. *Bhāsvatīratnadīpikā = Bhāsvatīratnamālā = Bhāsvatikārtharatnamālā.* A commentary on the *Bhāsvatī* of Śatānanda (*fl.* 1099).
Manuscripts:
IO 2918 (234 b). 43ff. Bengālī. From H. T. Colebrooke.
Sūcīpattra 18. *(Ratnamālā)* (See CC, vol. 1, p. 5, and vol. 2, p. 1)

The second verse is:

vedāntāgamakāvyaśāstranigamavyākhyānadīkṣāgurujyotiḥśāstravikāśanaikamihiro 'bhūt sāgarākhyo dvijaḥ/
śiṣyaprārthanayā tadīyatanayaḥ saṃvīkṣya horārthakaṃ
tene bhāsvatikārtharatnaracitāṃ mālāṃ hi bhaṭṭācyutaḥ//

The last is:

śrīmatprabhupravararāghavapādayugmapadmapajīvanaparotsukabhṛṅgarūpī/
śrībhāsvatīgaṇanaśāstrasubodhaṭīkām
abhyākarot kavivaro 'cyutabhaṭṭasiṃhaḥ//

The text contains computations for Śaka 1427 and 1456 (=A.D. 1505/06 and 1534/35).

2. *Bhāvārthamañjarī.* A commentary on the *Jātakapaddhati* of Śrīpati (*fl.* 1040). Manuscripts:

Śāstrī, Not. (1907) 101. 44 ff. Written in Śaka 1571 = A.D. 1649/50.
AS Bengal 7311 (G 3950). 63ff. Bengālī. Incomplete.

The second to fourth verses are:

śrīmadvāmanabhaṭṭaśekharamaṇeḥ satkarmavārāṃ nidheḥ
sūnuḥ sāgaracandramāḥ samajani prakhyātakīrticchaṭaḥ/
no doṣākaratām upaiti na jaḍo nāṅke vayaṃ lakṣyate
pūrṇaś cārukalābhir atra kamalāsnehaṃ dadhan nādbhutam//
vyākhyātā kāvyasindhor adhinavakavitāpadminīnāṃ vikāśe
bhāsvān uccair nabhasvān bhānabhau (?) prākṛtānāṃ kṛtānām/
nyāye vyāsakṛtau kṛtī kṛtadhiyām uccair vidhāne vidhir
bhaktaḥ śrīraghunāthapādayugale śrīsāgaraḥ saddvijaḥ//
bhāvābhāvavicārajātakavihitena X X X tatsūnur
jñānī śrīpatiṭīkāṃ kurute bhaṭṭācyutaḥ śrīmān/
śrīpativākyataror acyutavihitālaṅkṛtā navīnāpi
bhāvārthamañjarīyaṃ dayitā bhāvārthavido bhavitā//
The colophon to the sixth adhyāya reads:
itthaṃ gautamagotreṇa śrīyutācyutaśarmaṇā
kṛtaṃ śrīpatipaddhatyāṃ ṣaṣṭhādhyāyābhivarṇanam

ACYUTA PIṢĀRAṬI (*ca.* 1550-7 July 1621)

Acyuta, born at Kuṇḍapura (Tṛkkaṇṭiyūr) in Kerala, was a member of the Piṣāraṭi community, a section of

the Ampalavāsi community which is traditionally employed in looking after the external affairs of temples. He studied astronomy under Jyeṣṭhadeva *(q.v.)*; his patron was Ravivarman, King of Prakāśa (Veṭṭattunād) (1595-1607). He was a scholar in grammar (his famous pupil, Nārāyaṇa Bhaṭṭatiri [1560-*ca.* 1646], refers to him in his *Prakriyāsarvasva*), poetics, and medicine as well as in astronomy and astrology.

Acyuta is referred to by Vāsudeva (*ca.* 1600) in his *Bhṛṅgasandeśa:*

tasmāt pratyakprahitanayanaḥ kuṇḍagehādhivāsaṃ
sarvajñaṃ taṃ praṇama giriśaṃ bhaktimān acyutaṃ ca/
ekas tāvad vahati śirasi jyotiṣām ekam induṃ
jyotiścakraṃ nikhilam aparo dhārayaty antarāṅge//

An obituary verse was written by Nārāyaṇa Bhaṭṭatiri:

bhrātar jyotiṣatantra paryavasitā tithyarkṣayos te kathā
dhārṣṭyaikapravaṇāsi vaidyasaraṇe naṣṭo 'sy alaṅkāra bho/
he śabdāgama nirdayaṃ vibudhatālubdhair nipīḍiṣyase
vidyātmā svarasarpad atra bhavatām ādhārabhūr acyutaḥ//

And an old Granthavari in a manuscript at Baroda has (K. V. Sarma [1958] 38): jyeṣṭhadevanṭe śiṣyan tṛkkaṇṭiyūru acyutapiṣāraṭi/iddehaṃ sphuṭanirṇayaṃ goladīpikā mutalāya grantha <ñña1ku> kartāvākunnu/ See S. V. Iyer [1952/53]; K. K. Raja [1958] 122-125; and K. K. Raja [1963] 158-162.

Acyuta's jyotiṣa works include the following:

1. *Karaṇottama.* A work on astronomy in 5 chapters and about 100 verses written before 1596; it deals with the computation of the mean and true longitudes of the planets, with eclipses, and with the vyatīpātas of the sun and moon. The manuscripts are:

Kerala 3054 (660 C). 150 granthas. Copied by Suṣṭhu Keralaśarman, son of Nārāyaṇa, in A.D. 1596. Malayālam.
Baroda 10884 (h). 7ff. Malayālam.
GOML Madras R 663 (a). Ff. 1-16. Purchased in 1912/13 through Śeṣaśāyi Ayyaṅgar of Kottaiyur, near Kumbakonam. Grantha. Incomplete. With vivaraṇa.
GOML Madras R 663 (b). Ff. 16v-19v.
Kerala 3055 (1165 B). 150 granthas. Malayālam.
Kerala 3056 (L. 848 C). 150 granthas. Malayālam.
Kerala 3057 (L. 848 D). 550 granthas. Malayālam. With vivaraṇa.
Kerala 3058 (C. 809 B). 550 granthas. Malayālam. With vivaraṇa.
Kerala 3059 (C. 964 D). 550 granthas. Malayālam. With vivaraṇa.
Kerala 3060 (T. 552). 550 granthas. With vivaraṇa. Probably a copy of Kerala 3058.
Trippunithura 1, 1047. (see NCC, vol. 1, p. 58).

This work was edited with Acyuta's vivaraṇa by K. Raghavan Pillai in *TSS* 213, Trivandrum 1964. It begins:

gurūṇām caraṇāmbhojaparāgaparamāṇavaḥ/
manomukuram asmākaṃ punīyuranuvāsaram//
praṇipatya paraṃ jyotirgaṇapatyaparābhidham/
guruṇoktam avismartuṃ karaṇottamayāmy aham//

The manuscripts used are: Kerala 3055, 3057, 3058, 3059, and 3060.

2. *Karaṇottamavivaraṇa.* A commentary on his own *Karaṇottama.* Manuscripts:

GOML Madras R 663 (a). Ff. 1-16.
Kerala 3057-3060.

This work was edited with the *Karaṇottama.* The last verse is:

vaiṣṇavenācyutākhyena praṇītaṃ vivṛtaṃ kṛtam/
karaṇottamam ālokya parituṣyantu sūrayaḥ

3. *Uparāgakriyākrama.* A treatise in four chapters on lunar and solar eclipses. Completed in 1593. There exists a commentary on it in Malayālam. Manuscripts:

GOML Madras Malayālam 216. 47 pp. With Kerala-bhāṣā.
Kerala 2515 (404 A). 150 granthas. Malayālam.
Kerala 2516 (CM. 531 A). 150 granthas. Malayālam.
Kerala 2524 (404 B). 600 granthas. Malayālam. With Keralabhāṣā.
Kerala 2525 (CM. 173 G). 600 granthas. Malayālam. With Keralabhāṣā.
Kerala 2526 (CM. 531 B). 600 granthas. Malayālam. With Keralabhāṣā.
Kerala 2527 (CM. 628 B). 600 granthas. Malayālam. With Keralabhāṣā.
Kerala 2528 (CM. 541 C). 450 granthas. Malayālam. With Keralabhāṣā.

The first verse is:

mārtāṇḍākhyaṃ paraṃ jyotir natvāsmābhir vilikhyate/
hitāya mandabuddhīnām uparāgakriyākramaḥ//

The last is:

proktaḥ pravayaso dhyānāt jyeṣṭhadevasya sadguroḥ/
vicyutāśayadoṣeṇety acyutena kriyākramaḥ//

4. *Sphuṭanirṇaya.* A work in 6 chapters on the number of the constellations, mean and true positions of the planets, and the celestial sphere. Acyuta wrote this work under Ravivarman, and quotes from it in *Rāśigolasphuṭānīti* 47-48. There exists an anonymous vivṛti. Manuscripts:

GOML Madras R 3799 (b). Ff. 13-29v. Copied in 1921/22 from a manuscript of Iṭṭīri Vāriyar, Karakkāṭṭu-Vāriyam, Karakkāṭṭudeśam, Kavalappara post, Shoranore. With vivṛti.
Kerala—(L. 848 B)

Kerala—(C. 946 B)
Kerala—(C. 809 C)
Kerala—(C. 1945 B).

The text begins:

brahmāṇaṃ mihiraṃ vasiṣṭhapuliśau gargaṃ muniṃ lomaśaṃ
śrīpatyāryabhaṭau varāhamihiraṃ lallaṃ ca muñjālakam/
govindaṃ parameśvaraṃ satanayaṃ śrīnīlakaṇṭhaṃ gurūn
vande golavidaś ca mādhavamukhān vālmīkimukhyān kavīn//

The six chapters are:

1. bhasañkhyākathana
2. madhyamānayana
3. mandasphuṭānayana
4. bhagolasphuṭānayana
5. bhūgolasphuṭānayana
6. bhūgolasphuṭānayana.

5. *Chāyāṣṭaka.* A short text in 8 verses (on eclipses?). Manuscripts:

Kerala—(4116 A).

The colophon reads: acyuta piṣāraṭi uṇṭākkiya chāyāṣṭakam.

6. *Uparāgaviṃśati.* This work in 20 verses on eclipses was probably written by Acyuta. Manuscripts:

Trippunithura Palace Library 1075. With Keralabhāṣā.

It was published in *RSS* 2, 1954, with the Malayālam commentary.

7. *Rāśigolasphuṭānīti.* A work in 50 verses on the reduction of the Moon's longitude in its own orbit to ecliptic longitude. In it Acyuta quotes his own *Sphuṭanirṇaya* (47-48) and *Uparāgakriyākrama* (49); the latter reference indicates that the *Rāśigolasphuṭānīti* was written after 1593. Manuscripts:

GOML Madras Malayālam D 339. Pp. 90-95.

The text was edited and translated from this manuscript by K. V. Sarma [1955]. The concluding verse reads:

rāśigolasphuṭānītir acyutenaivam īritā/
krāntivṛttagatiś caivam āneyā golavittamaiḥ//

8. *Veṇvārohavyākhyā.* A Malayālam commentary on the *Veṇvāroha* of Mādhava of Sañgamagrāma (*ca.* 1340-1425), written at the request of Netranārāyaṇa, a spiritual head of the Nampūtiri Brāhmaṇas. Edited by K. V. Sarma, *RSS* 3, Trippunithura 1956.

9. *Horāsāroccaya.* An adaptation in 7 chapters of Śrīpati's *Jātakapaddhati.* The relationship of it to a Malayālam commentary on the *Jātakapaddhati* entitled *Horātantram Paribhāṣa* remains uncertain. There is an anonymous Malayālam commentary on the *Horāsāroccaya* in Kerala—(8327 C). Manuscripts:

Kerala—(8327 B).

The opening verse is:

bhaktyā gurūṇāṃ caraṇāravindaṃ natvācyuto daivavidāṃ hitāya/
sāroccayaṃ śrīpatinirmitasya horārthatantrasya vadāmy aśeṣam//

The chapters are:

1. bhāvānayana.
2. dṛṣṭisādhana
3. dikkālādibalajñāna
4. iṣṭakaṣṭaphalajñāna
5. āyurdāya
6. ariṣṭaphala
7. daśānirūpaṇa

ACYUTA (*fl. ca.* 1800)

One of the 18 collaborators in writing the *Navagrahapadakāni* (a set of astronomical tables) for Śarabhoji II, Rājā of Tanjore from 1798 to 1833; the others were: Ananta, Kṛṣṇa, Govinda, Tryambaka, Mṛtyuñjaya, Rāmacandra, Vāsudeva, Veñkaṭa, Veñkaṭanātha of Kaṃsapura, Veñkaṭanātha of Tañjapura, Veñkaṭanātha of Valla, Veñkaṭarāma, Śañkara, Śeṣa, Śeṣa Ṭoṇapa, Saptarṣi Śāstrin, and Subrahmaṇya. The unique manuscript bears the following numbers:

Tanjore D 11705 (BL 15703). 12ff. (Gurumanda).
Tanjore D 11706 (BL 15704). (Ravi).
Tanjore D 11707 (BL 15705). (Ravi and Candra).
Tanjore D 11708 (BL 15706). (Candra).
Tanjore D 11709 (BL 15707). (Candravikṣepa).
Tanjore D 11710 (BL 15708). (Kujādi)
Tanjore D 11711 (BL 15709). (Kuja<manda>śīghre).
Tanjore D 11712 (BL 15710). (Budha<manda>-śīghre).
Tanjore D 11713 (BL 15711). (Guruśīghre).
Tanjore D 11714 (BL 15712). (Gurumanda).
Tanjore D 11715 (BL 15713). (Śukra<manda>-śīghre).
Tanjore D 11716 (BL 15714). (Śani<manda>śīghre).
Tanjore D 11717 (BL 15715). (Sañkramapadaka).

The concluding verses of Tanjore D 11705 read:

jyotirvit kṛṣṇanāmā narapatihitakṛt kiṃ ca saptarṣiśāstrī
kālajño veñkaṭākhyo gaṇitabahumato vāsudevo 'py anantaḥ/
subrahmaṇyaś ca mṛtyuñjayagaṇakavaraḥ śañkaro rāmacandraḥ
śeṣo govindanāmā tad anu gaṇitavit ṭoṇapaḥ śeṣanāmā//
veñkaṭanāthaḥ kaṃsapurastho vallastho 'nyas tañjapurasthaḥ/
veñkaṭarāmo jyautiṣiko 'nyo 'py acyutanāmā tryambakasaṃjñaḥ//
etair vibudhair aṣṭādaśabhiḥ śāstroktam ekavākyatayā/
amaragurupadakam etac charabhamahīnetur ājñayā kḷptam//

ACYUTĀNANDA JHĀ (*fl.* 1939)

Author of a *Calanakalanapraśnottaravivaraṇa* (ed. *HSS* 94, Benares 1939) and editor of many astrological texts (see the index volume).

ACYUTĀNANDA ŚARMAN

The (Bengālī?) author of a *Jātakaumudī* (=*Jātakakaumudī*?). Manuscripts:

Benares (1906) 1557. 30ff=Benares (1963) 35502. 30ff. Bengālī. Incomplete.

AJITADEVA SŪRI (*fl.* 1570/1641)

A Jaina author, pupil of Maheśvara Sūri (*fl.* 1516) and member of the Pallīvālagaccha and the Mārtaṇḍaprakāśakagaccha, Ajitadeva Sūri wrote a *Piṇḍaviśuddhidīpikā* in 1570 and a *Paryūṣaṇākalpaṭīkā* in 1641. His jyotiṣa work is the *Lokasārayantra*, composed in Prākrit. Manuscripts:

AS Bombay 260. F. 231 (one folio only). Incomplete. From Bhāu Dājī.

The verses on f. 231 are numbered 28-46. The colophon reads: iti śrīpallīvālagacchamārtaṇḍaprakāśakagacchāmbhojadinamaṇīnāṃ śrīmaheśvarasūriśiromaṇīnāṃ pade śrījitadevasūriviracitaṃ lokasārayantraṃ samāptam.

AJERĀJA (=*AJAYARĀJA*)

Author of a *Sāmudrikabhāṣācaupai* or *Sāmudrikaśāstrabhāsakavitā* in Hindī. Manuscripts:

LDI (MPC) P/2014. 10ff. Copied in Saṃ. 1860=A.D. 1803. *(Sāmudrikaśāstrabhāsakavitā).*
LDI (MPC) P/8389. 16ff. *(Sāmudrikabhāṣācaupāī).*

AṆAYĀCĀRYA

Author of a Telugu commentary on the *Muhūrtadarpaṇa* of Vidyāmādhava (*fl. ca.* 1350). This has been twice published: [Madras?] 1872, and Madras 1878.

AṆṆĀV AIYAÑGĀR (*fl.* 1833/74)

Of the Ātreyagotra, Aṇṇāv Aiyañgār was the son of Appannārya and came from Kaṃsapura (Kañjanūru) near Tanjore; he prepared a pañcāṅga every year for Śivāji, the Rājā of Tanjore from 1833 to 1855. The existing pañcāṅgas, though at least the first is said to have been computed (by means of the vākyas) by order of Śiva son of Śarabha and king of Tañjānagarī, all postdate Śivāji's death.

1. *Kālayuktipañcāṅga.* For the Kāliyuktivarṣa Śaka 1780 (=A.D. 1858/59). Manuscripts:

GOML Madras D 13442. 56 pp. Grantha.
GOML Madras D 13443. 61 pp. Grantha and Tamil. Incomplete.

The second and third verses are:

śrīmattañjānagaryāṃ viracitavihṛteḥ śāsataś colasīmāṃ
tattādṛgbhosalīyānvayajaladhividhoḥ kelidhāmno guṇānām/
śakraśrībhūrisampaccharabhasutaśivakṣmāpater ājñayedaṃ
pañcāṅgaṃ niṣkalaṅkaṃ jagati vijayatām etad ā candratāram//
śrīmatkaṃsapure vasan dvijavaras triskandhapārāṅgataḥ
śrībodhāyanasūtravān vimaladhīrātreyagotrodbhavaḥ/
appannāryasutas trikālamatimān aṇṇāv ayaṅgār idaṃ
pañcāṅgaṃ prativatsaraṃ vitanute vākyaprakāreṇa saḥ//

2. *Akṣayapañcāṅga.* For 1866/67. Manuscripts:

Adyar List=Adyar Cat. 22 A 3. 84ff. Grantha.

3. *Pramodūtapañcāṅga.* For 1870/71. Manuscripts:

Adyar List=Adyar Cat. 28 I 53. 70ff. Grantha.

4. *Āṅgirasapañcāṅga.* For 1872/73. Manuscripts:

Adyar List=Adyar Cat. 28 I 53. 80ff. Grantha.

5. *Śrīmukhapañcāṅga.* For 1873/74. Manuscripts:

Adyar List=Adyar Cat. 28 I 53. 64ff. Grantha.

AṆṆAIYĀ

Author of a commentary in Karṇāṭakī on the *Muhūrtacintāmaṇi* of Rāma (*fl.* 1600). Manuscripts:

BORI 255 of Vishrambag I. 187ff. Copied in Śaka 1739 =A.D. 1817.

ʿAṬAʾ ALLĀH RUSHDĪ IBN AḤMAD I NĀDIR (*fl.* 1634/35)

The son of Aḥmad i miʿmār i Lāhawrī and elder brother of Luṭf Allāh and Nūr Allāh, ʿAṭaʾ Allāh made a Persian translation of the *Bījagaṇita* of Bhāskara (b. 1114), entitled *Bīj ganit* or *Tarjamah i Bīj ganit*, which he dedicated to the emperor Shāh Jahān (1628-1659) in A.H. 1044=A.D. 1634/35. He also wrote a *Khulāṣah i rāz* on arithmetic, algebra, and mensuration. For the manuscripts of the *Tarjamah i Bīj ganit* see C. A. Storey, *Persian Literature*, vol. 2, pt. 1, London 1958, p. 5: for those of the *Khulāṣah i rāz*, see *ibid.* pp. 15-16. An English translation of the *Tarjamah i Bīj ganit* by E. Strachey with notes by S. Davis was published in London, 1813.

ATRI

The ṛṣi Atri is associated with a solar eclipse in *Ṛgveda* 5,40; see also *Kauṣītakibrāhmaṇa* 24,3,4. Various problems connected with this eclipse are discussed by A. Ludwig [1885]; A. Bergaigne [1885]; W. D. Whitney [1885]; C. R. Lanman [1893]; F. K. Ginzel [1894]; A. Ludwig [1894]; S. B. Dikshit [1896] 62-63; P. C. Sengupta [1941a]; L. V. Gurjar [1947] 151; and V. G. Rahurkar [1957]. He is traditionally regarded as one of the eighteen founders of jyotiḥśāstra. One or several works ascribed to Atri existed by the sixth century, as he is quoted by Varāhamihira (*Bṛhatsaṃhitā* 46,1 and *Bṛhadyogayātrā* 29,3); the former of these quotations makes him even

more ancient, as it states that he was used by Garga. See P. V. Kane [1948/49] 5. Many later authors quote from Atri; but the *Atrisiddhānta* mentioned in Kavīndrācārya 857 is undoubtedly wishful thinking. There remains one work.

1. *Ātreyasaṃhitā* or *Kālavijñāna* in 10 Khaṇḍas.

Manuscripts:

VVRI 3805. 20ff. Malayālam.
PUL II App. p. 36 (see NCC, vol. 2, p. 67).

Ātreya is quoted in the *Kālaprakāśikā* of Nṛsiṃha.

ANANTA

The otherwise unknown author of a work entitled *Kālakṛtyaviveka*. Manuscripts:

SSP Calcutta III H 36 (see NCC, vol. 1, p. 122).
Jammu and Kashmir 2512. 33ff. Incomplete.

ANANTA

The otherwise unknown author of the *Śavalārthavicāraṇā* preserved in a manuscript in the collection of the Indian Museum, Calcutta. Manuscript:

IM Calcutta 1182 (see NCC, vol. 1, p. 123).

ANANTA

Author of a *Siddhāntabodhayantra*. Manuscripts:

Benares (1963) 35086. 2ff. Copied in Śaka 1451 = A.D. 1529.

ANANTA GŪRJARA

Author of a *Bhuvanakośa*. Manuscripts:

BORI 712 of 1883/84. 11ff. From Mahārāṣṭra.

ANANTA PAṆḌITA

Author of a *Bhāvaphala*, which is perhaps part of the *Janipaddhati* of Ananta (*fl. ca.* 1575). Manuscripts:

CP, Kielhorn XXIII 100. 55ff. Śaka 1739 = A.D. 1817. Property of Lakṣmaṇa Śāstri of Sāgar.

ANANTA PADMANĀBHA

Author of a *Laghujyotiṣārṇava*, published at Mysore in Karṇāṭakī script; a copy—B 3156—is at the Mysore GOL.

ANANTA BAKĀRISTA

Author of a *Nakṣatrasattrahautra*. Manuscript:

Munich 196 (Sanskrit 79 = Haug 98). 14ff.

The last verse is:

śrutisûtrânusâreṇa sattrahautranirûpaṇam/
akârîttham anantena bakâristena tuṣyati//

Is he identical with Ananta (*fl. ca.* 1600)?

ANANTA (*fl.* 1525)

The son of Śrīkānta, Ananta wrote in Śaka 1447 (= A.D. 1525) a set of tables entitled *Anantasudhārasasāraṇī* based on the elements of the *Sūryasiddhānta;* its purpose was to facilitate the making of pañcāṅgas. See S. Dvivedin [1892] 63-64; S. B. Dikshit [1896] 272-273. Commentaries were written on the *Anantasudhārasa* (= *Sudhārasa*) by Rāma (*fl. ca.* 1600) the son of Ballāla, by Ḍhuṇḍhirāja (*fl.* 1622), and by Śiva (before 1711); see also the anonymous *Anantasudhārasodāharaṇa* and *Grahaṇodaya*. Manuscripts:

Anup 4410. 6ff. Formerly owned by Maṇirāma Dīkṣita.
Benares (1878) 72 = Benares (1963) 35524. 17ff.
Benares (1963) 35420. 13ff. Incomplete.

The opening verse of the *Anantasudhārasasāraṇī* is:

ḍhuṇḍhivināyakacaraṇadvandvaṃ mudam ādadhan natvā/
sūktyānantarasākhyaṃ tanute śrīkāntajo 'nantaḥ//

ANANTA (*fl.* 1534)

The son of Keśava (*fl.* 1496) of Nandigrāma in Gujarat, Ananta wrote a ṭīkā on the *Laghujātaka* of Varāhamihira in Śaka 1456 (= A.D. 1534). See S. B. Dikshit [1896] 267. Manuscripts:

Bombay U. 487. 7ff.

He also wrote a *Kālanirṇayāvabodha*. Manuscripts:

Bikaner 856 = Anup 1698. 87ff. Copied in Śaka 1498 = A.D. 1576. Formerly owned by Gaṇeśa Paṇḍita.

The next to the last verse reads:

nandigrāmanivāsanaikaguṇavān śrīkeśavo daivavin
nānāśāstravicāraṇe paṭumatiḥ khyātaḥ praśasty ādibhiḥ/
tajjas taccaraṇāravindabhajane 'nantaḥ kanīyān imaṃ
cakre kālavinirṇayaṃ sphuṭataraṃ granthaṃ mude tadvidām//

Is his the *Kālanirṇaya* of Anantabhaṭṭa cited by Śaṅkaramiśra (*fl.* 1540/1600) in his *Dvaitanirṇaya* (NCC, vol. 1, p. 135)? It is also unclear what relation either might have to the *Kālanirṇaya* which is a part of the *Vidhānapārijāta* of Anantabhaṭṭa and which appears separately in the following manuscript:

DC 305. Ff. 1-112 and 114. From the Dīkṣit (A) Collection.

ANANTA (*fl. ca.* 1575)

The son of Cintāmaṇi of the Gārgyagotra and father of Nīlakaṇṭha (*fl.* 1587) and Rāma (*fl.* 1600/13), Ananta resided at Dharmapura on the Godāvarī in Vidarbha. He wrote a ṭīkā on the *Kāmadhenu* of Mahādeva (*fl.* 1357) according to the *Muhūrtacintāmaṇi* (13,9) of his son Rāma. The same source informs us that he authored a *Janipaddhati* (= *Jātakapaddhati*) apparently based on Śrīpati's (*fl.* 1040); *cf.* the

Bhāvaphala of Ananta Paṇḍita. See S. Dvivedin [1892] 64; S. B. Dikshit [1896] 274-275; and M. M. Patkar [1938] 164-165.

ANANTA (*fl. ca.* 1600)

Ananta, the son of Āpadeva, is apparently the grandson of the Mahārāṣṭrian saint Ekanātha (1528?-1600) and the grandfather of Anantadeva (*fl. ca.* 1675), the author of the *Smṛtikaustubha.* Ananta wrote a *Nakṣatrasattreṣṭiprayoga* or *Nakṣatreṣṭinirūpaṇa.* Manuscripts:

BORI 415 of 1883/84. 8ff. From Mahārāṣṭra. Incomplete (Kṛttikeṣṭi only).
BORI 6 of A1883/84. 12ff. (Ananta Bhaṭṭa).
N-W P VII (1882) 41. 18ff. Property of Paṇḍita Vāsudeva Śāstrī of Benares. *(Nakṣatrasattraprayoga* of Anantadeva).

Is Ananta identical with Ananta Bakārista?

ANANTA (*fl. ca.* 1650?)

The son of Puruṣottama Bhaṭṭa, Ananta wrote a *Saṃhitādīpikā;* his father may be identical with the Puruṣottama who commented on the *Makaranda* in 1631. Manuscripts:

Alwar 1984.
CP, Hiralal 6109. Belonging to the Bhonsalā Rājās of Nāgpur.
CP, Kielhorn XXIII 172. 11ff. Belonging to Jānojī Mahārāja of Nāgpur (the same manuscript as CP, Hiralal 6109?).

ANANTA (*fl. ca.* 1800)

One of the eighteen collaborators in writing the *Navagrahapadakāni* for Śarabhoji II, Rājā of Tanjore (1798-1833); see Acyuta (*fl. ca.* 1800).

ANANTAKUMĀRA BHAṬṬĀCĀRYA (*fl.* 1927/29)

Author of a *Praśnakalpataru,* published with a Bengālī translation at Barisal in 1927 (NL Calcutta 180. Kc. 92. 21), and of a *Nimittaphalavijñāna,* published with a Bengālī translation at Barisal in 1929 (NL Calcutta 180. Kd. 92. 8).

ANANTADEVA (*fl.* 1222)

The elder son of Gaṇapati of the Śāṇḍilyagotra, the son of Śrīpati, the younger brother of Bhāskara (b. 1114), Anantadeva was an astrologer at the court of Siṅghaṇa, the Yādava ruler of Devagiri beginning in 1209/10. In an inscription recording his establishment of a temple to Dvārajā at Bahāḷ in Khāndeś on 1 Caitra Śaka 1144 (= 14 March 1222) he mentions his commentaries on the *Chandaścittyuttarādhyāya,* the twentieth chapter of the *Brāhmasphuṭasiddhānta* of Brahmagupta (*fl.* 628/65), and on the *Bṛhajjātaka* of Varāhamihira (*fl. ca.* 550). See Kielhorn [1894/95] and S. B. Dikshit [1896] 254.

The relevant verses of the inscription are:

āsīd asīmamahanīyamahā maharṣiḥ
śāṇḍilya ity akhilabhūvalayāvataṃsaḥ/
yad dhomadhūmapaṭalena kalindakanyā-
sambhedakāntir abhavad divi devanadyāḥ//2//
ambhojabūr iva babhūva maheśvarākhyo
vaṃśe viśālatapasaḥ prathitasya tasya/
jñānī manorathasutaḥ śrutisadma satya-
lokāśrayo vibudharājaśirodhṛtāṅghriḥ//3//
yaḥ śekharākhyaṃ karanaṃ grahānām
praṣṭhaṃ pratiṣṭhāvidhidīpakaṃ ca/
cakre phalagrantham api sphuṭārthaṃ
laghuṃ ca ṭīkāṃ laghujātakasya//4//
tasmād aśeṣanijavaṃśaviśeṣako 'bhūt
saujanyabhūḥ sakalasādhudhuraṃ dadhānaḥ/
vāṇīvilāsavasatiḥ śrutipāradṛśvā
śrīśrīpatiḥ kṛtiniṣevitapādapadmaḥ//5//
tasyāgaṇyaguṇārṇavo gaṇapatiḥ punyātmanām agraṇīḥ
sūnuḥ sūnṛtavākkavivrajavibhur vidyānidhir vidyate/
śiṣyājñānatamāṃsi yasya nudato jātā jagadvyāpinī
kīrtiḥ kṛtsnakalākalāpanilayasyendoḥ prabhevojjva-
lā//6//
sadvidyadvijavṛndavanditapadadvandvāt tato 'jāyata
jyāyaḥkīrtir anantadeva iti yas triskandhaśāstrāśrayaḥ/
ramyaṃ brahmavinirmitaṃ vyavṛṇuta chandaściter
uttaraṃ
horāṃ ca pravarāṃ varāhamihirācāryapraṇītāṃ pṛth-
um//7//
. . . . . .
. . . . . .
tasyaiva (i.e., siṃhasya) daivajñagaṇāgraṇītvaṃ rāj-
ñaḥ prapadyāmum anantadevaḥ/
akārayat sa trijagajjananyāḥ prāsādam āsāditatatpra-
sādaḥ//17//
sāhāyyam arthena vidhāya dharme tasyānujanmeha
maheśvarākhyaḥ/
imāṃ prasannām anavadyapadyāṃ vinirmame nirmala-
dhīḥ praśastim//18//
śeṣo yāvad vahati vasudhām eṣa śīrṣair aśeṣair
yāvad velāvalayam akhilaṃ nābdhayo laṅghayanti/
tārās tārāpatir api raver maṇḍalaṃ yāvad etat
tāvad devyā bhavatu bhavanaṃ bhūṣaṇaṃ bhūtalas-
ya//19//
ṣaṭkone sadalaśatādhike sahasre
varṣāṇāṃ śakapṛthivīpateḥ prayāte/
caitrādyapratipadi citrabhānuvarṣe
prāsādo 'raci ruciro 'yam ambikāyāḥ//20//

ANANTADEVA (*fl. ca.* 1675)

The son of Āpadeva, the son of Ananta (*fl. ca.* 1600), the son of Āpadeva, the son of the Mahārāṣṭrian saint Ekanātha (1528?-1600), Anantadeva wrote a vast compilation called the *Smṛtikaustubha.* Information about this work will be found in P. V. Kane [1930/62], vol. 1, pp. 447-453. It was written for Bāja Bahāduracandra, the Candra rājā of Almora and Nainital from 1638 to 1678. A section of the *Smṛtikaustubha* is the *Tithikaustubha.* See NCC, vol. 1, pp. 127-128. Manuscripts of the *Tithikaustubha* are:

DC 859. 44ff. Copied in Śaka 1686 = A.D. 1764. From the Dīkṣit (A) Collection.
Oppert II 8031. Property of Raghubhaṭṭa of Bhaṭṭugosvāmivaṭṭāra, Tanjore District.

The *Smṛtikaustubha* was published in Bombay 1909.

ANANTADHANA (*fl.* 1528)

Anantadhana, the son of Khaḍgadhana, wrote a Bengālī commentary entitled *Svarodayabhāṣāvinyāsa* on the *Svarodaya* which is cast in the form of a dialogue between Īśvara (Śiva) and Pārvatī; one of his examples is for Śaka 1450 = A.D. 1528. Manuscripts:

IO Bengālī 1042. 44ff.
IO Bengālī 1510f. 23ff.

For both of these manuscripts see the end of the article on IO 3122.

ANANTANĀRĀYAṆA ŚĀSTRIN

Author of a Telugu paraphrase of the *Kālacakra*, published Madras, 1882.

ANANTABHAṬṬA (*fl.* 1625/31)

The son of Nāgadeva and Bhāgīrathī and a follower of the Kāṇvaśākhā of the Śuklayajurveda, Anantabhaṭṭa lived in Benares. Among his works is a *Grahayajñavidhāna*. See NCC, vol. 1, pp. 134-135, and CC, vol. 1, pp. 13-14.

ANANTABHAṬṬOPĀDHYĀYA (before 1384)

A son of Mahādeva, Anantabhaṭṭopādhyāya wrote a *Tithinirṇaya* before 1384; it was epitomized by Rāmacandra in *ca.* 1450. See NCC, vol. 1, p. 136. Manuscripts:

AS Bengal 2656. Copied in 1384.
PL, Buhler III E 119. 24ff. Copied in Saṃ. 1547 = A.D. 1490. Property of Maṅgalaśaṅkara of Ahmadābād. (Mistakenly called a vyākhyā on the *Tithipradīpaka* of Bhaṭṭojī Dīkṣita, who flourished about a century after the manuscript was copied.)
Jammu and Kashmir 2519. 95ff. Copied in Saṃ. 1574 = A.D. 1517.
Baroda 10611. 72ff. Copied in Saṃ. 1583 = A.D. 1526.
Anup 1702 = Bikaner 1027A. 54ff. Copied by Śaṅkarabhaṭṭa Ākolakara in Śaka 1544 = A.D. 1622.
PL, Buhler III E 112. 57ff. Copied in Saṃ. 1704 = A.D. 1647. Property of Śrīdhara Bhaṭṭa of Śoṇḍurṇī. Bühler notes two other copies.
AS Bengal 2657.
Bikaner 1027B. 32ff.

The colophon reads: iti śrīmadanantabhaṭṭopādhyāyaviracitas tithinirṇayaḥ samāptaḥ.

ANANTARĀMA DVIVEDIN

Author of a *Praśnasaṅgraha*. Manuscripts:

Bombay U. Desai 1484. 8ff.

ANANTARĀMA VIDYĀVĀGĪŚA (*fl. ca.* 1810)

A son of Rāmacaraṇa Nyāyālaṅkāra, Anantarāma Vidyāvāgīśa wrote a *Tithitattvavyavasthāsaṅkṣepa*. See NCC, vol. 1, p. 138, and S. C. Banerji [1957] 192.

ANANTĀCĀRYA MHĀḶAGĪ (*fl.* 1876)

A resident of Solāpūra and a pupil of Āpā Jośī Bhāṇḍāraka Vaṭhekara (died Śaka 1788 = A.D. 1866), Anantācārya wrote an *Āpābhaṭī* on jātaka, and an *Anantaphaladarpaṇa* in Śaka 1798 = 1876. See S. B. Dikshit [1896] 488.

CATURVĀṬUKA ANANTĀRYA (alias *BAKA*)

Guru of Tenāli Gopanācārya, Anantārya wrote a *Kālavibhāga* which is cited in the *Vaikhānasasaṅgrahasmṛtimīmāṃsā* of Śiṅgarācārya, the son of Jagganārya. See NCC, vol. 1, p. 145. The relevant lines of Śiṅgarācārya (GOML Madras R 1608 (b)) are:

caturvāṭukapūrvaṃ tv anantārya iti śrutaḥ
bakākhyena punar nāmnā āryaḥ kālavibhāgakṛt
kṛtaṃ tena mahāgranthaṃ dṛṣṭaṃ dīpakanāma ca

The colophon of Gopanāthācārya's *Vaikhānasasūtrānukramaṇikā* (GOML Madras R 3461 and R 3473 (a)) begins:

śrīmaccaturvāṭikānantācāryakṛpāpātraśrīmattenāligopanāthācāryanāmadheyaviracita . . . . Thus it is clear that he was a follower of Vaikhānasāgama, and probably a Telugu.

ANAVAMADARŚIN SAÑGHARĀJA (*fl.* 1241)

The Mahāsthavira of the Hastavanagalya Mahāvihāra in southern Ceylon under Parākramabāhu II (1236-1271), Anavamadarśin Sañgharāja wrote a long astrological compendium in three prakaraṇas and thirty adhyāyas entitled the *Daivajñakāmadhenu* in which he cites Varāhamihira (*fl. ca.* 550), Ātreya, and Bhojarāja (*fl. ca.* 995-1056), among others. This was published from one manuscript by Śīlaskandha, Sthavira of the Śailabimbārāma Vihāra in Doḍanduwa, Ceylon, in *BSS* 97, 104, 116, Benares 1906. The adhyāyas are:

I caritaprakaraṇa
1. sāmānyavidhi
2. ādityacarita
3. candracarita
4. bhaumacarita
5. budhacarita
6. jīvacarita
7. śukracarita
8. śanaiścaracarita
9. rāhucarita
10. saṅkīrṇacarita

II ādeśaprakaraṇa
11. sāmānyādeśavidhi
12. āyurdāyādeśa
13. daśāvipākādeśa

14. aṣṭavargādeśa
15. yogaguṇādeśa
16. aṅgalakṣaṇādeśa
17. dohotpātādeśa
18. svapnādeśa
19. tiryagcaritādeśa
20. saṅkīrṇādeśa

III maṅgalyavidhānaprakaraṇa
21. sāmānyavidhi
22. doṣaśuddhividhāna
23. garbhadaśāvidhāna
24. kaumāradaśāvidhāna
25. śikṣāvidhāna
26. yauvanadaśāvidhāna
27. upabhogadaśāvidhāna
28. upakṣayadaśāvidhāna
29. vīradaśāvidhāna
30. saṅkīrṇadaśāvidhāna

The second verse of the first adhyāya is:

anugatajinaśiṣṭir brahmavaṃśaikadṛṣṭir munir anavamadarśī pāradarśī kalānām/
praṇayati sakalām sadgranthasārārthadogdhrīṃ vibudhajananiṣevyāṃ daivavitkāmadhenum//

ANDUBARIUS

The *Chronicon Paschale,* a Byzantine chronicle of the early seventh century (ed. L. Dindorff, 2 vols., Bonn 1832), recounts the following legend (vol. 1, p. 64): "In the time of the building of the tower (of Babel), an Indian appeared of the race of Arphaxad, a wise astronomer named Andubarius, who first wrote astronomy for the Indians." The complete lack of a historical basis for this story is proved—if proof is necessary—by the fact that the nu in Andubarius must be a misreading of a miniscule beta: the name is Semitic, corresponding to the Arabic ʿAbd al-Bāriʾ ("the slave of the Creator").

ANIRUDDHA JHĀ

Author of a *Saṃvatsarakṛti;* probably from Mithilā. See NCC, vol. 1, p. 151.

ANIRUDDHA DVIVEDA

The pupil of Datta, Aniruddha Dviveda wrote a *Jātakendu* in at least eleven chapters. Manuscripts:

AS Bengal 7036 (G 397). 10ff. Incomplete.

The second verse is:

śrīdvivedāniruddhena dattaśiṣyeṇa dhīmatā/
tanyate bālabodhāya jātakendur manoharaḥ//

The titles of the first 10 chapters are:

1. iṣṭakālādhyāya
2. dvādaśabhāvādhyāya
3. diṅnirṇayādhyāya
4. ṣaḍbalādhyāya
5. rātriguṇādhyāya
6. śatrumitrādhyāya
7. grahasvarūpādhyāya
8. saṃjñādhyāya
9. garbhādhānādhyāya
10. praśnādhyāya.

ANIRUDDHA (b. 1463; *fl.* 1494/95)

The son of Bhāvadāsa of Benares, the son of Mahāśarman of Yamanapura, Aniruddha was born in Saṃ. 1520 (=A.D. 1463) and wrote a ṭīkā on Śatānanda's (1099) *Bhāsvatī* at the age of thirty-one; he finished it on Saturday, the first tithi of the kṛṣṇapakṣa of Aśvayuj in Śaka 1417 (=19 September 1495). The examples are for Śaka 1416, Saṃ. 1551 (=A.D. 1494), the year of the birth of his son Hīra. See BORI 1883/84, p. 82. Manuscripts:

BORI 198 of 1883/84. 22ff. From Gujarat.

Verses 2-4 read:

āsīd vaidyādhirājaḥ khalu yamanapure śrīmahāśarmanāmā
tatputro bhāvadāsaḥ sakalaguṇanidhiḥ sambabhūvāgrajanmā/
yaḥ pūrvābhyāsasaṅgād api sakalapadaṃ dharmam agryaṃ caritvā
śāntiprānte prayāto haricaraṇamanāḥ pattane śaṅkarasya//
aniruddhas tasya suto gurujanacaraṇāravindakṛtasevaḥ/
kurute budhopayuktāṃ saṃkṣiptāṃ bhāsvatīṭīkām//
śrīhīrasya tanūjasya janmakālāgatān iha/
dhruvakāhargaṇodbhūtān udāharati sa sphuṭam//

The last two verses are:

svaraśaśiśakrasamete śakanṛpakāle 'śvayugbahulapakṣe/
pratipadyuta śanivāre 'niruddhaviduṣā samāpitā ṭīkā//
khanayanatithivatsarake mahati kule janma me bhavad viduṣām/
śaśiguṇavarṣeṇa mayā vimalā śiśubodhinī racitā//

ANILAKUMĀRA (b. 1925)

Author of a compilation called *Yautakadarpaṇa* based on the *Muhūrtacintāmaṇi* of Rāma (*fl.* 1600), the *Muhūrtavallabha* of Nārāyaṇa (*fl.* 1572), and the *Śuddhidīpikā of* Śvīnivāsa. It was published in Bengālī script with a Bengālī anuvāda at Huglī 1959 (RGS p. 5).

ANŪPASIṂHA (*fl.* 1674/98)

The son of Karṇasiṃha and the Mahārāja of Bīkāner from 1674 to 1698, Anūpasiṃha was both an assiduous collector of manuscripts (his collection forms the core of the Anup Sanskrit Library at Bīkāner) and a patron of many scholars, including Maṇirāma Dīkṣita, Vidyānātha, and the Josirāya (apparently Vīrasiṃha Gaṇaka) who wrote on jyotiṣa. To Anūpasiṃha himself is falsely attributed an *Anūpakaraṇa.* Manuscripts:

Anup 4411. 17ff.

The real author was the Josirāya.

ANNAJI (=ANVAJI)

Alleged author of a ṭīkā on the *Jaiminisūtra*. Manuscripts:

N-W P I (1874) 8=N-W P I (1874) 79. 160ff. Property of Jagannātha Jotiṣi (=Śukla) of Benares.

APŪCHA JHĀ (fl. ca. 1850/1900)

A resident of the village Koilakha in Mithilā, Apūcha Jhā wrote the following works on jyotiṣa:

1. *Jātakapaddhatyudāharaṇa*, a commentary on the *Jātakapaddhati* of Keśava (*fl. ca.* 1500). Published at Benares 1925 (IO San. D. 420).

2. *Nirṇayārka*. Jyotiṣa? Ed. Harinandana Śarman, Cawnpore Saṃ. 1970 (=A.D. 1913). (IO 3437).

3. *Makarandakaraṇa*, a commentary(?) on the *Makaranda* of Makaranda (*fl.* 1478). Manuscripts:

Mithila 245. 7ff.

4. *Laghujanmapaddhati*. See NCC, vol. 1, p. 191.

5. *Luptābdanirṇaya*. See NCC, vol. 1, p. 191.

APPAYA DĪKṢITA

Author of a commentary, called variously vivṛti, vṛtti, or vyākhyā, on the *Pañcasvarā of* Prajāpatidāsa (*fl.* before 1642). Manuscripts:

RORI Cat. II 5640=RORI 5640. 14ff. Copied in Saṃ. 1811=A.D. 1754.
AS Bengal 7146 (G 621)=Mitra, Not. 1478. 12ff.
Mithila 162. 9ff.
N-W P V (1880) B 25. 11ff. Property of Rāmacandra and Udayānanda of Alwar.
N-W P V (1880) B 26. 11ff. Property of Rāmacandra and Udayānanda of Alwar. (Is this the same as N-W P V (1880) B 25?)
N-W P IX (1885) C 5. 12ff. Property of Bābū Śāstrī Tailaṅga of Benares.
Oxford CS d. 776 (i). 21ff.
PUL II 3607. 6ff. (āyurdāya only)

APPAYA SŪRI

Author of a commentary on the *Jātakacandrikā* of Veṅkaṭeśa entitled *Śaradāgama*. Manuscripts:

Adyar List=Adyar Cat. 26 A 29. 67ff. Grantha. (Aṣṭanarasiṃha)
Adyar Index 2196=Adyar Cat. 29 A 14. 27ff. Telugu. (Timmayya Sūri in Adyar Cat.)
GOML Madras R 2533 (i). Ff. 36-52. (Appa Sūri)
Kerala 5755 (5756). 600 granthas. Grantha. (Appaya Sūri)
Kerala 5756 (1385 A). 550 granthas. Grantha. Incomplete. (Appaya Sūri)

As well as the variants Timmayya and Appa found in the manuscripts listed above, NCC, vol. 1, p. 201 believes his real name may be Nṛhari and NCC, vol. 2, p. 290 calls him Appāsūri alias Nṛhari or Nṛsiṃha.

APPAYA (fl. 1491)

The son of Perubhaṭṭa of the Marla vaṃśa, Appaya wrote a *Grahacandrikāgaṇita* in which is mentioned the year Śaka 1413 (=A.D. 1491). Manuscripts:

GOML Madras (Telugu) R 337 (d). Ff. 67-76. Copied in 1916/17 from a manuscript belonging to Tejomūrtula Veṅkaṭappa Siddhāntigāru of Tuni in the Godāvarī District. With Āndhraṭīkā.

This work has 7 chapters:

1. madhyagrahādhikāra
2. sphuṭagrahādhikāra
3. vakravakratyāgodayāstamayādhikāra
4. pātādhyāya
5. lagnādhikāra
6. candragrahaṇādhikāra
7. sūryagrahaṇādhikāra

The first verse is:

śrīmarlavaṃśakalaśāmbudhikaustubhena
śrīperubhaṭṭatanayena virājitena/
sā dīyatām abhimatāppayadhīmateyaṃ
bodhāya sarvadharaṇīsurapaṇḍitānām//

ABŪ AL-FAYḌ FAYḌĪ (fl. 1587)

The son of Mubārak of Nagor, the son of Khizr of Sind, Fayḍī translated the *Līlāvatī* of Bhāskara (b. 1114) into Persian at the request of the emperor Akbar (1556-1605) in A.H. 995=A.D. 1587; the title of the translation is *Līlāwatī* or *Tarjamah i Līlāwatī*. The manuscripts are listed by C. A. Storey, *Persian Literature*, vol. 2, pt. 1, London 1958, pp. 4-5. There are two editions: Calcutta 1827 and [NP] A.H. 1271=A.D. 1854/55.

ABBAYA KAVI (fl. 1807)

Author of a *Gaṇitāmṛta* following the Saurapakṣa, in which he mentions Śaka 1729 (=A.D. 1807). Manuscripts:

GOML Madras D 15882. 18 pp. Telugu. With Āndhravyākhyā. (First adhyāya only)
GOML Madras R 393 (a). Ff. 1-10v. Telugu. Purchased in 1911/12 from C. Viśvanātha Śāstrigal of Vizianagaram.

This work contains 5 chapters.

1. madhyagrahādhyāya
2. sphuṭagrahādhyāya
3. pātādhyāya
4. candragrahaṇādhyāya
5. sūryagrahaṇādhyāya

The first verse is:

vāgīśācyutaśaṅkarendradinakṛcchītāṃśubhaumendujān
gīrvāṇādhipapūjyaśukradinakṛtputreśaputrāmarān/
natvāhaṃ gaṇitāmṛtaṃ raghupatiṃ śrīsaurasāmyasphuṭaṃ
vakṣyāmy abbayasatkavīndravibudhas triskandhavitprītaye//

ABHAYAKUŚALA

Author of a *Vivāhavidhivādacaupāi* in Gujarātī. Manuscripts:

LDI (MPC) P/8354. 2ff.

ABHAYACANDRA (before 1500)

A Śvetāmbara Jaina of the Kharataragaccha and the pupil of Ānandarāya, Abhayacandra wrote an astrological treatise in Prākṛt entitled *Ulluṇṭhavādimukhakīlaka*, in 123 gāthās. Manuscripts:

AS Bombay 299. 11ff. Copied by Karmasāgara Gaṇi in Jhājharipura in Saṃ. 1557 varṣe kārtika sudi 10 dine sanivāsare = Saturday, 31 October 1500. From Bhāu Dājī.

The last two verses are:

kharataragacchadivāyarasugurū āṇandarāyasīseṇa/
ujjhāya abhayacande lihiyam ihaṃ johasaṃ grantham//
ullaṇṭhavādimukhakīlam idaṃ hi śāstraṃ
jyotirvidāṃ hṛdayakośavikāsanaṃ ca/
nilleṭhanāṃ (?) kumatināṃ madacittadhāma
śvetāmbareṇa racitaṃ nijasaukhyahetoḥ//

ABHAYACANDRA (*fl. ca.* 1325)

The teacher of the Karṇāṭa scholar Keśavavarṇin (*fl* 1359), the Jaina Abhayacandra wrote, among other things, a vyākhyāna on the *Trilokasāra* of Nemicandra (*fl. ca.* 975). See Velankar, p. 162 and NCC, vol. 1, p. 205. Manuscripts:

BORI 599 of 1875/76. 184ff. Copied in Saṃ. 1904 = A.D. 1847. From Jaipur (called the *Trilokasāra* of Abhayanandin with the vṛtti of Mādhavacandra).
Mudvidri 164 = Moodbidri II p. 135 a.

ABHIMANYU RĀJAN

The (Rājasthānī?) author of an astrological text entitled *Praśnaprakāśa*. Manuscripts:

Anup 4877 = Bikaner 704. 23ff.
CP, Hiralal 3173. Property of the Chaube family of Gaṛhā in Jabbalpur District.
Lahore 10 (see NCC, vol. 1, p. 230; CC, vol. 1, pp. 25 and 772).
LDI 7368 (5307). 12ff. Copied by Caraṇasādhu in *ca.* 1600.

AMARA SĀDHU

Author of a *Vivāhapaṭala*. There exists a commentary *(Bālāvabodha)* on this in Gujarātī. Manuscripts:

LDI (LDC) 2525. 16ff. (with *Bālāvabodha*).

AMARANĀTHA VIPRA (fl. 1824)

Author of a pañcāṅga entitled *Abdapañcamī* (= *Abdapañjī*) for the year Śaka 1746 (= A.D. 1824). Manuscripts:

Dacca 118c (see NCC, vol. 1, pp. 203 and 248).

AMARAŚAÑKARA BHAṬṬĀCĀRYA (*fl.* 1962)

Author of a *Cāpīyatrikoṇamiti* published in Bengālī script in Calcutta 1962 (RGS p. 128).

AMARASIṂHA (*fl.* 1597/1620)

The Rājā of Mewar from 19 January 1597 to 26 January 1620, Amarasiṃha I patronized the son of Mathurā (Mathurātmaja, *q.v.*), who wrote an *Amarabhūṣaṇa* and an *Iṣṭaghaṭikāśodhana* which are sometimes attributed to Amarasiṃha himself.

AMAREJYA (= *AMAREḌYA*?) (= *AMAREŚA*?)

Author of a *Yogayātrā*. Manuscripts:

Mysore and Coorg 315. Property of Mahādeva Joyisa of Sringeri.

AMAREḌYA (= *AMAREŚA*?) (= *AMAREJYA*?)

The son of Gosvāmin and pupil of Candrabhūṣaṇa, Amareḍya wrote a bhāṣya on the *Sūryasiddhānta* in Karṇāṭakī. Manuscripts:

GOML Madras D 13512. Ff. 1-135v. Telugu and Nandināgarī.
OI Baroda 13379(c). Ff. 169-197. Nandināgarī. (Amarendī?).

The first verse is:

gosvāmisūnur amareḍya iti prasiddho daivajñavaidyaviduṣāṃ tilakaṃ praṇamya/
śrīcandrabhūṣaṇaguruṃ karavāṇi sūryasiddhāntam īḍyam aham adbhutabodhanārtham//

AMAREŚA (= *AMAREḌYA*?) (= *AMAREJYA*?)

Author of a commentary (vyākhyāna) in Karṇāṭakī on the *Karaṇaprakāśa* of Brahmadeva (*fl.* 1093). Manuscripts:

IO 6304 (Mackenzie II 36). 58ff. Nandināgarī.

The colophon of this manuscript reads: iti śrībrahmadevaviracite karaṇaprakāśe amareśaviracite karṇāṭabhāṣāvyākhyāne. . . .

AMALASŪRI

See Malayendu Sūri (*fl. ca.* 1400)

AMĪCANDRA (*fl.* 1842)

Amīcandra Śrāvaga of the Ajamerāgotra wrote a Hindī translation of the *Līlāvatī* of Bhāskara (b. 1114) at Jayapura on 2 śuklapakṣa of Āṣāḍha in Saṃ. 1899 = *ca.* 8 July 1842. Manuscripts:

RORI Cat. II 8496. 88ff. Copied by Motīlāla Lakhamīcanda on 10 kṛṣṇapakṣa of Jyeṣṭha in Saṃ. 1925= *ca.* 2 June 1868.

The colophon reads: iti śrībhāskarīyasiddhāntaśiromaṇeḥ pātīlīlāvatī kī bhāṣā amīcandreṇa śrāvaga ajamerā gotreṇa budhi anusāreṇa śrījayanagare racitā/ saṃvat aṣṭādasa sataka navanavato adhikāya/ sukala dauji āṣāḍa kī racī sumañgala dāya//

AMĪRACANDRA

Amīracandra (Paṇḍita) of the Lomaśagotra is author of three works on jyotiṣa:

1. *Bhāvijñānagrantha.* Manuscripts:

Jammu and Kashmir 2872. 131ff.

2. *Svaraśāstrasañgraha.* Manuscripts:

Oudh XI (1878) Yoga 16. (see NCC, vol. 1, p. 257; CC, vol. 1, p. 28).

3. A ṭīkā (or vyākhyā) on the *Śīghrabodha* (of Kāśīnātha?). Manuscripts:

VVRI 3300. 32ff. Copied in Saṃ. 1900=A.D. 1843. (vivāhaprakaraṇa). (Vyākhyā).
VVRI 3291. 10ff. (Tīkā). Incomplete.
VVRI 3314. 46ff. (muhūrtaprakaraṇa). (Ṭīkā).
VVRI 3322. 9 ff. (Vyākhyā). Incomplete.
VVRI 3335. 51ff. (Vyākhyā). Incomplete.

AMĪŚAÑKARĀTMAJA

This son of Amīśañkara, whose name is unknown, wrote a *Cakrasāra.* Manuscripts:

Benares (1963) 34690. 96ff. Copied in Saṃ. 1866=A.D. 1809.

AMṚTAMĀDHAVA VĀGHOLAKĀRA

Author of a *Strījātaka* published with a Marāṭhī translation in Bombay 1905 (IO 19. B. 12).

AMṚTALĀLA

The son of Devadatta and a resident of Indrapurī (Delhi) near Kurukṣetra, Amṛtalāla wrote an *Amṛtalaharīsāraṇī* (=*Kheṭakṛti*). Manuscripts:

Kathmandu (1960) 21 (III 1156). 49ff. Copied in Śaka 1677=A.D. 1755. Incomplete.

The first verse is:

śrīmatkurukṣetrasamīpavarttinī yā paṇḍitair indrapurī virājate/
śrīdevadattasya suto dvijānugas tasyāṃ vasan kheṭakṛtiṃ cikīrṣati//

AMṚTĀNANDA

Author of a commentary *(Amṛtacaṣaka)* on the *Aṣṭāñganirṇaya.* Manuscripts:

Benares (1963) 34774. 13ff. Copied in Saṃ. 1874=A.D. 1817.
PUL II 3262, 13ff. Copied in Saṃ. 1881=A.D. 1824
Oxford CS d. 886 (ii). 14ff. *(Aṣṭāñganirṇayāmṛta).*
PUL II 3263. 2ff. Incomplete.

AMBĀRĀMA

Author of the *Siddhāntādarśa,* a commentary on the *Siddhāntacintāmaṇi* of Vyāsa Sadānanda. Manuscripts:

I0 8053 (Wilkins VI a (ii)). 22ff. Copied *ca.* 1790. From Sir Charles Wilkins. Incomplete. (only to verse 70 of the first adhikāra).

The third verse at the beginning is:

mihirabhāskaracakrayute rathe
sugaṇakāryabhaṭāvṛtabandhure/
lalitalallaturañgamayojite
jayati bhaumabhaṭo gaṇakāgṛṇiḥ//

The commentary proper begins: iha khalu purāṇajainayavanānāṃ jyotiḥśāstrāṇy udadhivadanagāhyākalajya vyāsāvaṭañkakīkābhidhasyātmajena vyāsasadānandena bālāvabodhanakṛtaḥ sañkṣiptaḥ siddhāntacintāmaṇināmā granthaḥ samarthitaḥ / tatra ṭīkāṃ vinā sandehanirasanaṃ na bhavati / hy ato tatkṛpāpātreṇa śiṣyāṇunā upādhyāyāvaṭañka ambārāmeṇa siddhāntādarśākhyaṃ ṭippaṇaṃ racyate /

AYODHYĀNĀTHA ŚARMAN (1864-1926)

The son of Śyāmacaraṇa Śarman (1833-97) and an astronomer of Benares. See S. Dvivedin [1892; repr. 1933] 133-134.

AYODHYĀPRASĀDA ŚARMAN (=*AYODHYANĀTHA ŚARMAN*?) (*fl.* 1899)

Author of two works on astrology.

1. Vivaraṇa on the *Bhuvanadīpaka* (of Padmaprabha Sūri ?). Manuscripts:

N-W P II (1877) B 35. 44ff. Property of Khuśālpurī of Benares.

2. *Ayodhyājātaka,* a work on horoscopy in 121 verses written at Agra in Śaka 1821=A.D. 1899. Published with bhāṣāṭīkā by the Śrī Veñkaṭeśvara Press, Bombay Saṃ. 1995, Śaka 1860=A.D. 1938.

Two additional verses at the end read:

kvindudvivasucandrābde śakākhye prathite bhuvi/
ayodhyājātakaṃ nāma pustakaṃ sapariśramam//
āgarānagarāntaḥsthatājagañjanivāsinā/
śrīayodhyāprasādena niramāyi satāṃ mude//

ALAKHADĀSA

Author of a *Pavanavijayasvarodaya,* otherwise known as the *Añkolavidhāna.* Manuscripts:

SOI 33=Cat. I 1360-33. 406 granthas. Copied in Saṃ. 1927=A.D. 1870.

ALAVEŚVARA (between *ca.* 1050 and 1486)

The son of Vāmana, Alaveśvara wrote a *Jātakakalpavallī,* in which he quotes Jīvaśarman, Purāṇayavanācārya, Satyācārya, and the *Rājamṛgāṅka* of Bhojadeva (*fl. ca.* 995-1056). Manuscripts:

AS Bombay 349. Ff. 4-56. Copied in Saṃ. 1543=A.D. 1486. From Bhāu Dājī. Incomplete.

Verses 388-389 of chapter 8 read:

mahātripurasundaryāḥ prasādād alaveśvaraḥ/
vāmaniḥ kalpalatikām cakre samyak phalapradām//
guruprasādaṃ samavāpya samyag vijñātatattvaḥ sakalāgamānām/
śrīvāmaniḥ sarvavidāṃ variṣṭhaś cakre kavir jātakakalpavallīm//

There are 8 adhyāyas:

1. bhāvasādhana 110 vss.
2. dṛṣṭisādhana 11 vss.
3. grahāṇāṃ balanirṇaya 113 vss.
4. miśrakādhyāya 97 vss.
5. āyuḥprakāśaka 112 vss.
6. āyuḥprakāśaka 98 vss.
7. ariṣṭabhaṅgavivecana 65 vss.
8. daśākramaphalavyaktivinirṇaya 391 vss.

ALAŚIÑGARĀCĀRYA (=*ALAŚIÑGYA*)

A member of the Kāśyapagotra, Alaśiṅgarācārya wrote a *Jātakarāja* or *Jātakarājīya.* Manuscripts:

GOML Madras R 1526. 14ff. Telugu. Presented by Pendyāla Subrahmaṇya Śāstrigāru of Cocanada in 1915/16. Incomplete.

IO 6381A (3661). 23ff. Grantha. Acquired 5 December 1921.

The first verse is:

śrīkāśyapakulīnena śiṅgyā (?) rsyeṇa dhīmatā/
nāmnā jātakarājo 'yaṃ bālabodhāya x x te//

KALPAKURTI ALLANĀRYASŪRI

Author of a ṭīkā in Telugu on the *Sūryasiddhānta.* Manuscripts:

GOML Madras R 3090. 222ff. Telugu. Copied from a manuscript belonging to Koṭikalapūḍi Śivarāmadāsa Pantulugāru of Bobbili; this manuscript was copied by Sunarao Veṅkaṭakṛṣṇamma on Wednesday 3 śuklapakṣa of Bhādrapada in the year Śukla=8 September 1869.

The colophon reads: iti śrīsūryasiddhānte kalpakurtijyautiṣagajakesaryallanāryasūriviracitāndhrabhāṣāṭīkāyāṃ. . . .

ALLĀḌANĀTHA

The son of Lakṣmaṇa Siddha, Allāḍanātha wrote for a king named Sūryasena a *Nirṇayāmṛta* in 4 prakaraṇas: vratanirṇaya, tithinirṇaya, śrāddhanirṇaya, and āśaucanirṇaya. Manuscript:

Berlin 1170 (Chambers 560). 126ff.

AṢṬANARASIṂHA

See Appaya Sūri.

ASITA

An astrologer quoted first by Varāhamihira in *Bṛhatsaṃhitā* 11,1; see P. V. Kane [1948/49] 5 (his reference to *Bṛhadyogayātrā* 19,1 is wrong).

AHOBILANĀTHA (=*AHOBILA PAṆḌITA* or *ŚĀSTRIN*)

Ahobilanātha wrote an astronomical text which is called variously *Ahobilanāthīya, Ahobilanāthasiddhānta,* and *Grahatantra;* a commentary on it was written by Vellāla Veṅkaṭayajvan in *ca.* 1627. Manuscripts:

GOML Madras D 15447=D 12538 Ff. 63v-121. Grantha. Incomplete.

Oppert II 1946. 20 pp. Telugu. Property of Veṅkaṭeśvarajosya of Siddhavaṭṭa, Kaḍapa District.

Oppert II 1947. 82 pp. Telugu. Property of Veṅkaṭeśvarajosya of Siddhavaṭṭa, Kaḍapa District.

GOML Madras (Telugu) 1242.

GOML Madras (Telugu) 1244.

The *Ahobilanāthīya* has twice been published in Telugu script in Madras; these editions are B 971 and B 3839 of the Mysore GOL. B 3839 contains an Āndhraṭīkā.

AHOBILABHAṬṬA (=*AHOBALABHAṬṬA*)

Author of a *Pañcāṅgapaddhati.* Manuscripts:

Adyar List (2 copies) = Adyar Index 3462 = Adyar Cat. 28 F 28. 51ff. Grantha. Incomplete (ends with fourth adhyāya).

AHOṢAKA DEVA

See Moṣadeva.

ĀÑGIRAS

See Aṅgiras and Bṛhaspati, the son of Aṅgiras.

ĀTUKA

The son of Sadāśiva, Ātuka (spelled Āṭuka in NCC, vol. 2, p. 42) wrote a *Tājikamuktāvalī* in 135 verses. Manuscripts:

BORI 73 of A 1882/83. 7ff. From Rājasthān.

ĀTMABODHA

Author of a *Svarārṇavasārāmṛta.* Manuscripts:

LDI 7423 (5008). 12ff. Copied in Saṃ. 1660=A.D. 1603.

ĀTMĀRĀMA

Author of a *Naṣṭakāladīpikā.* Manuscripts:

CP, Hiralal 2491. Property of Śrīkṛṣṇa Pāṇḍuraṅg of Bālāpur, Akolā District.

ĀTMĀR ĀMA ŚARMAN VIDYĀLAṄKĀRA (*fl.* 1836)

Author of a *Bhuvanaprakāśa* of which part 1 was published with a Bengālī translation at Serampore in 1836 (NL Calcutta 180. Jc. 83. 3).

ĀTREYA

See Atri.

ĀDITYA KAVIKRĀNTA

Author of a vivaraṇa on an unidentified *Viśvādarśa*. Manuscripts:

CP, Kielhorn XXIII 155. 112ff. Copied in Saṃ. 1604 = A.D. 1547. Property of Sadāśivabhaṭṭa Ṭopale of Burhāṇpur.

ĀDITYADEVA

Author of a *Balatantramahārṇava* or *Narapativijayīya* based on the *Narapatijayacaryā* of Narapati (*fl.* 1175). Manuscripts:

Adyar Index 3974 = Adyar Cat. 8 J 70. 189ff. Incomplete (ends with the rāśicakra).
GOML Madras D 13938 = Sastri, Rep. (1893-94) 188. Ff. 108-154. Telegu. Formerly the property of Velamūri Veṅkambhaṭlugāri. With Āndhraṭīkā of Siṃha.
Mysore (1922) 313. 34ff.
Mysore (1922) 370. 42ff.
Mysore (1922) 1802. Ff. 52-197.
Mysore (1911 + 1922) 2252. Ff. 46-168.
Mysore (1911 + 1922) 2631. Ff. 20-65. Incomplete (ends with the abhiṣekavidhi).
Mysore (1911 + 1922) 2639. Ff. 89-139. Incomplete (ends with the ghuṭikāgrayoga).

The relation of this work to Narapati's remains obscure. The GOML Madras manuscript contains Narapati's text, but the colophon reads: iti śrīmahārājādhirāja-sūryavaṃśānvayaśrīsarasvatīvaraprasādakulapadmādityadevaviracite narapatijayacaryāsvarodaye . . . . The Mahārājādhirāja is not identified; but it is known that Narapati wrote at Vallinagara under Ajayapāla, the Caulukya monarch of Gujarat from *ca.* 1172 to 1175.

ĀḌITYABHAṬṬA (= *ĀDITYASŪRI*) (between 1200 and 1325)

Also known as Kavivallabha, and perhaps as Mālava (see NCC, vol. 2, p. 75), Ādityabhaṭṭa of the Gargagotra was the pupil of Viśveśvara and the author of a *Kālādarśa* or *Kālanirṇaya*, which appears in both prose and metrical versions. Manuscripts:

BORI 325 of 1880/81. 190ff. Copied in Saṃ. 1581 = A.D. 1524. *(Kālanirṇaya)*.
Kerala 3497 (12404). 4500 granthas. Malayālam. Copied in ME 708 = A.D. 1533. With vyākhyā.
PL, Buhler III E 74. 202ff. Copied in Saṃ. 1660 = A.D. 1603. Property of Maṅgalaśaṅkara of Ahmadābād.
Baroda 1048. 149ff. Copied in Śaka 1673 = A.D. 1751.
Adyar List (2 copies) = Adyar Index 1266 =
Adyar Cat. 22 J 13. 246 ff. Telugu. With ṭīkā.
Adyar Cat. 22 J 14. 46ff. Grantha.
Adyar Cat. 22 J 16. 212ff. Grantha. Incomplete.
Adyar Cat. 33 I 10. 170ff. Grantha. Incomplete.
AS Bengal 2655.
BORI 142 of Vishrambag I. 171ff.
CP, Kielhorn XIX 51. 141ff. Property of Hariguru of Sammalpur.
GOML Madras R 4276 (d). Ff. 59-72.
Hamburg A. 46a. From Oppert. (Kavivallabha).
IO 1655 (2705). Ff. 2-131. Telugu. From Mackenzie.
IO 5596 (Mackenzie VIII. 69a). 165ff. Grantha.
IO 5597 (Burnell 145a). 10ff. Copied by Tiruveṅkaṭācārya. Grantha (the metrical version).
Jaipur.
Kerala 3495 (352B). 3900 granthas. Telugu.
Kerala 3496 (324). 2200 granthas. Telugu. Incomplete.
Nagpur 375 (1482). 33ff. From Nāsik.
Oppert I 6560. Property of Durbha Rāmaśāstrulu of Maḍḍi, Vizagapatam District.
Oppert II 1045. Property of Tirupuṭkuli Śrīkṛṣṇa Tātācāryār of Kāñcīpuram, Chingleput District.
VVRI 3895. 123ff. Telugu.
VVRI 4420. 63ff. Telugu.

Verse 3 of the metrical version is:

viśveśvarācāryapadāravindapraṇāmavistāritavāgvilāsaḥ/
ādityasūriḥ smṛtitattvadarśī kālaṃ vinirṇeṣyati mandabuddhyai//

ĀDITYASŪRI

Author of a *Tithinirṇaya*. Manuscripts:

IM Calcutta 3187 (see NCC, vol. 2, p. 76).

This is perhaps Ādityabhaṭṭa's *Kālanirṇaya*, though one would not expect to find a copy of that text in Bengal.

ĀDINĀTHA

Author of a *Trailokyadīpaka or Daṇḍajñāna (goṣṭhī)* on divination from the hours of the day and their colors, in four chapters. Manuscripts:

Oudh V (1875) VIII 6. 32 pp. Copied in A.D. 1838. Property of Śrīkṛṣṇa of Ayodhyā, Faizabad Zila.
AS Bengal 7179 (G 7900) B. 6ff. Copied by Vaḍāgaṇeśa Mahalle in Nāgapura on Thursday, Śrāvaṇa śukla 7 of Saṃ. 1937 = 12 August 1880.
AS Bengal 7119 (G 7840). 3ff. Incomplete (ends at the beginning of the 4th adhyāya).
Lucknow 520. A 20 G (46135).
Oudh XXI (1889) VIII 18. 32 pp. Property of Raghuvara Prasāda of Gonda Zila.

The first verse is:
natvā guruṃ samāsādya sarvaśāstrāṇi sarvaśaḥ/
kriyate ādināthena praśnaṃ trailokyadīpakam//

PAÑCĀRGULA ĀDINĀRĀYAṆA ŚĀSTRIN

Author of a *Strījātaka* published in Telugu script with a Telugu ṭīkā in Madras 1926 (IO San. D. 840).

ĀDIŚARMAN (before 1625)

Author of a *Jātakāmṛta* and of a vyākhyā or ṭīkā, *Amṛtaprakāśa*, on the same. Ādiśarman is quoted by Divākara (*fl.* 1625) in his *Prauḍhamanoramā*. Manuscripts:

PUL II 3431. 4ff. Copied in Saṃ. 1889 = A.D. 1832. (*Amṛtaprakāśa;* āyurdāya only).
PL, Buhler IV E 122. 71ff. Vyākhyā. Property of Bālakṛṣṇa Jośī of Ahmadābād.
Rajputana p. 30. From a Jaina Bhāṇḍār in Jaisalmer. Ṭīkā.
VVRI 6922. 60ff. (with *Amṛtaprakāśa*).

The last verse of the mūla is:

ity ādiśarmasamproktajātakāmṛtakīrtanāt/
paramātmani jīvātmā sphuṭād vo daśame śamait (?)//

ĀNANDA

See Bhagavadānanda.

ĀNANDA

Author of a *Praśnasāra*. Manuscripts:

IM Calcutta 1273 (see NCC, vol. 2, p. 106).

ĀNANDAKANDA

See Makaranda (*fl.* 1478).

ĀNANDADHARA (=GOVINDĀNANDA?)

Author of a *Jātakasāra*. Manuscripts:

PUL II 3423. 15ff. Copied in Saṃ. 1829 = A.D. 1772.

ĀNANDANILAYA

The son of Konāmbā and Veṅkaṭācala, Ānandanilaya wrote a *Horāvibhūṣaṇa* in at least six chapters based on the *Horāsāra*. Manuscripts:

GOML Madras D 13917. Ff. 32-57. Telugu. Incomplete.

At the end of the fifth adhyāya occur the following verses:

ānandanilayaprokte śāstre horāvibhūṣaṇe/
yogaprakaraṇaṃ nāma pañcamaṃ samudīritam//
yan mātāpitarau khyātau konāmbāveṅkaṭācalau/
ānandanilayākhyena tenedaṃ sāṅgam īritam//
krodhanābde sitānaṅgabhārgave candramaulinā/
etad dvijenālikhitaṃ horāśāstravibhūṣaṇam//
horāsāraṃ tu saṅgṛhya mayā sudhijanā mudā/
dṛṣṭvā nandas tu doṣaś cet samīkurvantu sarvadā//

The chapters are:

1. rāśiprakaraṇa
2. grahaprakaraṇa
3. janmaprakaraṇa
4. āyuḥprakaraṇa
5. yogaprakaraṇa
6. sthānaphalajñānaprakaraṇa

ĀNANDAMUNI (*fl.* 1674)

Author of a *Gaṇitasāroddhāra* in Saṃ. 1731 = A.D. 1674. Manuscripts:

Baroda 3100 = PL, Buhler IV E 54. 66ff. Copied in Saṃ. 1879 = A.D. 1822. Formerly the property of Uttamarāma Jośī of Ahmadābād.

Perhaps the same as the work entitled *Gaṇitasāroddhāra* for which no author is listed. Manuscripts:

N-W P I (1874) 188. 6ff. Property of Sāma Lāla of Benares.
N-W P I (1874) 200. 6ff. Property of Divākara Gaṇaka of Benares.

ĀNANDASIDDHA

Author of a *Nakṣatrarogāvalivicāra*. Manuscripts:

SOI 3316 = Cat. II: 1024 (3316). 5ff.

ĀNANDASUNDARĪ

Author of a *Praśnaśāstra*. Manuscripts:

Kerala 10408 (6127A). 350 granthas. Malayālam. Incomplete.
Kerala 10409 (T. 481). 288 granthas. Incomplete.

ĀNANDASŪRI

The pupil of Jineśvara, the pupil of Devabhadra, Ānandasūri wrote a commentary (vṛtti) on the *Kṣetrasamāsa* of Jinabhadra Gaṇi Kṣamāśramaṇi (see Velankar p. 99). His vṛtti on the anonymous (?) *Laghukṣetrasamāsa* (Velankar p. 335) is probably the same work.

ĀPADEVA (RAGHUNĀTHA DHARMĀDHIKĀRĪ) (before 1746)

A resident of Janasthāna, Āpadeva is the author of three works combining jyotiḥśāstra and dharmaśāstra.

1. *Grahapīṭhamālā = Grahapīṭhasādhana = Kheṭapīṭhamālā = Khecarapīṭhamālā*. Manuscripts:

PL, Buhler IV E 70. 10ff. Copied in Saṃ. 1803 = A.D. 1746. Property of Uttamarāma Jośī of Ahmadābād. Bühler notes another copy.
BORI 94 of 1882/83. 5ff. Copied in Saṃ. 1804 = A.D. 1747. From Gujarat (Apādeva).
Baroda 11057. 14ff. Copied in Śaka 1702 = A.D. 1780. With Āpadeva's own vyākhyā.
Ānandāśrama 3357. *(Grahapīṭhamālā)*.
Ānandāśrama 3451. *(Khecarapīṭhamālā)*.
Baroda 3106. 21ff. With his own vyākhyā.
Benares (1963) 35664. 15ff. With ṭīkā. (Āpādeva).
Benares (1963) 37025. Ff. 1-18 and 1. With ṭīkā.

CP, Kielhorn XIX 74. 2ff. Property of Javāhara Śāstrī of Chāndā. *(Kheṭapīṭhamālā)*.
DC 375. 13ff. (Āpodeva Raghunātha Dharmādhikārī).
DC 4954. 216ff. No author mentioned.
IM Calcutta 5671 (see NCC, vol. 2, p. 124).
IM Calcutta 5808 (see NCC).
Nagpur 518 (1264). Ff. 5-24. From Nāsik.
Oudh VIII (1876) VIII 9. 42 pp. Property of Keśava Prasāda of Khīrī Zila.
PUL II App., p. 11 (see NCC).
Śāstrī, Not. 1907 (p. 53) (see NCC).
SOI 6750 (List 565). With ṭippaṇa. (Āpābhaṭṭa).
SOI 7867. With ṭippaṇa. No author mentioned.

2. *Grahapīṭhamālāvyākhyā.* Manuscripts:

Baroda 11057. 14ff. Copied in Śaka 1702 = A.D. 1780.
Baroda 3106. 21ff.

3. *Tithitattvasāra.* Manuscripts:

PL, Buhler III E 110. 6ff. Property of Bālakṛṣṇa Jośī of Ahmadābād.

ĀPASTAMBA

Name of the school to which belongs the *Āpastambaśrautasūtra* (sixth century B.C.?). A part of the *Āpastambaśrautasūtra* is the *Āpastambaśulbasūtra*, which has been commented on by Kapardisvāmin, Karavindasvāmin, Gopāla, and Sundararāja. The manuscripts are listed in NCC, vol. 2, pp. 131-135. The text has been edited with a German translation by A. Bürk [1901/02], and with the commentaries of Kapardisvāmin, Karavindasvāmin, and Sundararāja by D. Srinivasachar and S. Narasimhachar, *MSS* 73, Mysore 1931. For studies of the śulbasūtras see G. Thibaut [1875]; M. Cantor [1877] [1904]; H. G. Zeuthen [1904]; H. Vogt [1906] [1906/07]; B. Levi [1909/10]; G. Milhaud [1910]; N. K. Mazumdar [1922]; R. N. Apte [1926]; C. Müller [1929]; B. Datta [1932]; S. Ganguli [1932]; G. Lorio [1933]; F. Drenkhahn [1936]; L. V. Gurjar [1942a] [1942b]; K. N. Kamalamma [1948]; and M. P. Tripathi [1959].

ĀPĀJIPANTA KHĀṆḌEKARA (*fl.* 1800-1808)

See Rāghava.

ĀPPĀ GOSVĀMI KHIRE (*fl.* 1819)

The son of Rāma and an inhabitant of Revaḍā, Āppā Khire wrote in Śaka 1741 = A.D. 1819 a ṭīkā entitled *Lalitā* on the *Paddhaticandrikā* composed by Rāghava in 1818. See S. B. Dikshit [1896] 298.

ĀMARĀJA = ĀMAŚARMAN (*fl. ca.* 1200)

The son of Mahādeva of the Śrījanyālayakula, resident of Ānandapura in Saurāṣṭra, uncle of another Mahādeva (*fl.* 1263) who commented on the *Jyotiṣaratnamālā* of Śrīpati (*fl.* 1040), and pupil of Trivikrama (*fl.* 1080), Āmarāja belonged to a family which was closely connected with the Caulukya dynasty in Gujarat; his grandfather, Bandhuka, was associated with Karṇa (1066/67-*ca.* 1093) and his brother, Ajayī, with Bhīma II (*ca.* 1178-*ca.* 1241). Āmarāja is author of a *Vāsanābhāṣya* on the *Khaṇḍakhādyaka* written by Brahmagupta in 665. In this work he refers to the previous commentaries by Lalla (*fl.* 748?), Pṛthūdakasvāmin (*fl.* 864), Utpala (*fl.* 966), and Someśvara (*fl.* 1040), as well as to Varāhamihira (*fl. ca.* 550), Bhojarāja (*fl. ca.* 995-1056), and Bhāskara (b. 1114), and to Durga, Bhāradvāja, Rīhlīya, the *Pauliśatantra*, the *Pradyotanasiddhānta*, and the *Sūryasiddhānta*. Manuscripts:

Benares (1963) 34420. Ff. 81, 87, 89-93, and 95-99.
Kathmandu (1960) 62 (I 1207). 54ff. Incomplete. (Ātmārāma).
A manuscript copied in Saṃ. 1783 = A.D. 1726 belonged to Bhāu Dājī (Bhāu Dājī [1865] 398).
The *Vāsanābhāṣya* was edited with the *Khaṇḍakhādyaka* by Babua Misra, Calcutta 1925. The final colophon reads: iti paṇḍitamahādevātmajaāmaśarmaviracite .... On p. 20 is found: ato bījaphalānayanam asmadupādhyāyatrivikramakṛtaṃ, and this bīja is stated to be for Śaka 1102 = A.D. 1180.

ĀRYAKULA

This is perhaps the correct transliteration of the A.r.y.k.l mentioned by Ibn al-Nadīm (*Fihrist*, p. 271 Flügel).

ĀRYABHAṬA (?)

Author of a *Siddhāntamuktāvali.* Manuscripts:

Oppert II 6502. Property of Narasiṃhācārya of Kumbhagoṇam, Tanjore District.

ĀRYABHAṬA (b. 476; *fl.* 499)

Āryabhaṭa himself states (Gaṇitapāda 1) that he wrote the *Āryabhaṭīya* in Kusumapura (= Pāṭalipura, modern Patna) and that he was twenty-three years old in Kali 3600 (= A.D. 499) (Kālakriyā 10). The statement of Nīlakaṇṭha (b. 1443) that he was born in the Aśmakajanapada (on Gaṇitapāda 1) probably refers to his predecessor as commentator, Bhāskara (*fl.* 629). He wrote two works: the *Āryabhaṭīya* influenced particularly South India, his ārdharātrika system Northwest India, Īrān, and the early ʿAbbāsid caliphate.

1. The *Āryabhaṭīya*, expounding the audayaka system and based in part on the *Paitāmahasiddhānta* of the *Viṣṇudharmottarapurāṇa*, contains four parts:

1. Daśagītikā (10 vss.)
2. Gaṇitapāda (33 vss.)
3. Kālakriyā (25 vss.)
4. Golapāda (50 vss.)

(the last three pādas are known collectively as the *Āryāṣṭaśata*). Aside from anonymous commentaries which will be listed in *CESS*, ser. B, the following are known:

Prabhākara (*ca.* 525); Bhāskara (*fl.* 629); Someśvara (*fl.* 1040); Sūryadeva (b. 1191); Parameśvara (*ca.* 1380-1460); Nīlakaṇṭha (b. 1443); Yallaya (*fl.* 1482); Raghunātha (*fl.* 1590); Kodaṇḍarāma (*fl.* 1854) (in Telugu); Ghaṭīgopa; Bhūtiviṣṇu; and Virūpākṣa Sūri (in Telugu).

Manuscripts:

Berlin 834 (Chambers 480). 9ff. Copied by Kalyāna, the son of Meghajī Rāola at Kāśī in Śaka 1547 = A.D. 1625. With the commentary of Bhūtiviṣṇu.

Bombay U 332. 10ff. Copied in Śaka 1574 = A.D. 1652.

Berlin 1730 (or. fol. 808). 7ff. Copied by Viṣṇu in Śaka 1611 = A.D. 1689.

Bombay U 333. 4ff. Copied in Śaka 1782 = A.D. 1860 from a manuscript copied in Śaka 1611 = A.D. 1689 (Berlin 1730?).

Baroda 9331. 6ff. Copied in Saṃ. 1918 = A.D. 1861.

Bombay U 330. 6ff. Copied in Śaka 1785 = A.D. 1863 from a manuscript copied in Śaka 1760 = A.D. 1838. (See Bhāu Dājī [1865] 397.)

Bombay U 335. 35ff. Copied in Śaka 1785 = A.D. 1863. With the *Vāsanābhāṣya* of Someśvara. (See Bombay U 329.)

IO 6271 (Burnell 293). 95 pp. Copied from a manuscript in the Chiṛakkil Rājā's Library by Uṇṇi Panikar at Calicut in 1863. With *Bhaṭadīpikā* of Parameśvara.

IO 6266 (Burnell 265). 60ff. Copied in 1865 from a manuscript at Travancore. Malayālam. With the commentary of Sūryadeva.

Kerala 1852 (5957 B). 2000 granthas. Copied in ME 1043 = A.D. 1868. Malayālam. With the commentary of Sūryadeva.

Poleman 4668 (Smith Indic 214). 70ff. Copied in 1909/12 from a manuscript in Madras. Grantha.

GOML Madras R 5261. 142ff. Copied in 1926/27 from a manuscript belonging to Nārāyaṇa Nambūdirippāḍ, Pūmalli-mana, Chalasseri, Malabar District. With the commentary of Nīlakaṇṭha. Incomplete (only Kālakriyāpāda and Golapāda).

Adyar List (2 copies) =

Adyar Index 669 = Adyar Cat. 21 F 37. 37ff. Grantha. Incomplete.

Adyar Index 670 = Adyar Cat. 8 H 5. 371ff. Telugu. With vyākhyā of Raghunātha.

Ādhyan Nambūdripād 30 (see NCC, vol. 2, p. 171).

Ānandāśrama 6668.

Ānandāśrama 6680.

Anup 4445. 27ff. Formerly the property of Jyotiṣarāja (without Daśagītikā).

Anup 4446. 2ff. With the commentary of Bhūtiviṣṇu (Daśagītikā only).

Anup 4447. 9ff. With *Bhaṭapradīpikā* of Parameśvara (Daśagītikā only).

AS Bengal 6827 (G 770) = Mitra, Not. 1566. 8ff.

Baroda 3065. 6ff.

Baroda 7873 (a). 58ff. Grantha. With the commentary of Parameśvara.

Baroda 9384. 4ff.

Baroda 9886 (a). 66ff. Malayālam. With the commentary of Sūryadeva. Incomplete.

Baroda 9886 (b). 80ff. Malayālam. With the commentary of Nīlakaṇṭha. Incomplete (Golapāda only).

Baroda 9887. 176ff. Malayālam. With the commentary of Nīlakaṇṭha. Incomplete (to middle of Golapāda).

Baroda 10884 (e). 6ff. Malayālam.

Baroda 13742. 82ff. Malayālam. With the commentary of Sūryadeva. Incomplete (not all of Golapāda).

Bombay U 329. 50ff. With *Vāsanābhāṣya* of Someśvara. (See Bhāu Dājī [1865] 397-398.)

Bombay U 331. 8ff. Copied from a manuscript written in Śaka 1785 = A.D. 1863. (See Bombay U 330.)

Bombay U 334. 17ff. With a Marāṭhī translation made in 1860.

BORI 859 of 1887/91. 5ff. (f. 1 missing). Incomplete (Golapāda only). From Gujarat.

BORI 848 of 1891/95. 106ff. With *Bhaṭadīpikā* of Parameśvara.

Calcutta Sanskrit College 2. 7ff. Incomplete (Kālakriyā only).

Cambridge R.15.97. 16ff. With the commentary of Yallaya. Copied from Cambridge R.15.98.

Cambridge R.15.98. 20ff. Telugu. With the commentary of Yallaya.

GOML Madras D 13385. Ff. 1-6v. Grantha.

GOML Madras D 13386. Ff. 1-6v. Copied by disciples of Bālakumāra, the former owner. Incomplete (lacks Kālakriyā).

GOML Madras D 13387. Ff. 21-26v. Telugu.

GOML Madras D 13388. Ff. 1-6. Telugu. Order of sections is Kālakriyā, Gaṇitapāda, Golapāda, and Daśagīti.

GOML Madras D 13389. Ff. 7-102v. Grantha. With the *Bhaṭaprakāśa* of Sūryadeva.

GOML Madras D13390. 121 ff. With the *Bhaṭaprakāśa* of Sūryadeva.

GOML Madras D 13391. Ff. 6v-71. Telugu. With the *Bhaṭaprakāśa* of Sūryadeva.

GOML Madras D 13392. 62ff. With the *Bhaṭaprakāśa* of Sūryadeva. Incomplete (ends at Kālakriyā 35).

GOML Madras D 13393. 127ff. Grantha. With the commentaries of Sūryadeva and Yallaya.

GOML Madras D 13394. 66ff. Grantha. With the *Bhaṭadīpikā* of Parameśvara.

GOML Madras R 3870(c). Ff. 145v-150v. Telegu, Grantha, and Nandināgarī. Purchased in 1921/22 from Aṇṇāsvāmi Śāstrigal, Bhavani, Coimbatore District.

GOML Madras R 4875. 93ff. With the *Bhaṭaprakāśa* of Sūryadeva.

Granthappura p. 37 (see NCC, vol. 2, p. 171).

IO 2767 (3210). 7ff. + 80ff. Grantha. Ff. 1-7 contain the mūla, Ff. 8-87 mūla with the *Bhaṭaprakāśa* of Sūryadeva. From Mackenzie.

IO 6263 (Burnell 107d). 10ff. Malayālam. With tabular summary.

IO 6264 (Burnell 233). 16ff. Malayālam. Incomplete

(Daśagītikā [three times] and Kālakriyā 1-6).
IO 6265 (Burnell 517). 134ff. Grantha. With the *Bhāṣya* of Bhāskara. Incomplete (ends in the middle of Golapāda).
IO 6268 (Mackenzie VIII. 46) = Mackenzie 5. 38ff. Grantha. With the *Bhaṭaprakāśa* of Sūryadeva.
IO 6269 (Mackenzie III. 79b). 16ff. Telugu. With the *Bhaṭaprakāśa* of Sūryadeva. Incomplete (only Daśagītikā 1 and Gaṇitapāda 2-33).
IO 6270 (Mackenzie VIII. 89). 75ff. Grantha. With the commentaries of Sūryadeva (in part) and Yallaya. Incomplete (Kālakriyā and part of Golapāda).
IO 6272 (Burnell 107c). 45ff. Malayālam. With the *Bhaṭadīpikā* of Parameśvara.
IO 6273 (Burnell 77). 76ff. Grantha. With a commentary in bhāṣā.
Kavīndrācārya 855.
Kerala 1823 (475A). 150 granthas. Malayālam.
Kerala 1824 (1092A). 150 granthas. Malayālam.
Kerala 1825 (5131B). 150 granthas. Malayālam.
Kerala 1826 (13259B). 150 granthas. Malayālam.
Kerala 1827 (13300A). 150 granthas. Malayālam.
Kerala 1828 (13305B). 150 granthas. Malayālam.
Kerala 1829 (C. 575C). 150 granthas. Malayālam.
Kerala 1830 (C. 1024A). 150 granthas. Malayālam.
Kerala 1831 (C. 166A). 150 granthas. Malayālam.
Kerala 1832 (C. 1869A). 150 granthas. Malayālam.
Kerala 1833 (CM. 8E). 150 granthas. Malayālam.
Kerala 1834 (CM. 621A). 150 granthas. Malayālam.
Kerala 1835 (501A). 125 granthas. Malayālam. Incomplete.
Kerala 1836 (C. 2160A). 125 granthas. Malayālam. Incomplete.
Kerala 1837 (5848). 950 granthas. Malayālam. With the bhāṣya of Nīlakaṇṭha. Incomplete.
Kerala 1838 (C. 157). 2100 granthas. Malayālam. With the bhāṣya of Nīlakaṇṭha. Incomplete.
Kerala 1839 (C. 1415A). 3400 granthas. Malayālam. With the bhāṣya of Nīlakaṇṭha. Incomplete.
Kerala 1840 (13259A). 1250 granthas. Malayālam. With the bhāṣya of Bhāskara. Incomplete.
Kerala 1851 (13305A). 850 granthas. Malayālam. With the commentary of Ghaṭīgopa.
Kerala 1853 (C. 224A). 2000 granthas. Malayālam. With the commentary of Sūryadeva.
Kerala 1854 (C. 2121 C and D). 2000 granthas. Malayālam. With the commentary of Sūryadeva.
Kerala 1855 (C. 2320A). 2000 granthas. Malayālam. With the commentary of Sūryadeva.
Kerala 1856 (C. 2475). 2000 granthas. Malayālam. With the commentary of Sūryadeva.
Kerala 1857 (T. 24). 2000 granthas. With the commentary of Sūryadeva.
Kerala 1858 (C. 1828). 1950 granthas. Malayālam. With the commentary of Sūryadeva. Incomplete.
Kerala 1859 (C. 2160D). 450 granthas. Malayālam. With the commentary of Sūryadeva. Incomplete.
Kerala 1860 (10617). 1750 granthas. Malayālam. With the *Bhaṭadīpikā* of Parameśvara.
Kerala 1861 (C. 1363B). 1750 granthas. Malayālam. With the *Bhaṭadīpikā* of Parameśvara.
Kerala 1862 (L. 1334A). 1500 granthas. Malayālam. With a Keralabhāṣā.
Kerala 1863 (C. 2333). 2000 granthas. Malayālam. With a Keralabhāṣā.
Lucknow 520. A79A (45755).
Lucknow 520. A79A (45886).
Madras Univ. R.K.S. 52(a) (see NCC).
Mysore (1922) A 25. 73ff. With the commentary of Sūryadeva.
Mysore (1911 and 1922) B 573. 113ff. With the Telugu commentary of Virūpākṣa Sūri.
Mysore (1911 and 1922) C 859. 3ff.
Mysore and Coorg 261. With commentary in bhāṣā. Property of Mahādeva Joyisa of Śṛṅgeri.
N-W P I (1874) 48. 4ff. Property of Pūrṇānanda Jotishi of Benares.
Oppert I 1208. Property of Vaṅkīpuram Śrīnivāsācāryār of Tiruvallūr, Chingleput District.
Oppert I 4518. 125 pp. Grantha. Property of Kṛṣṇa Jyośyar of Pudukoṭa, Tanjore District.
Oppert I 7851. Property of Paravastu Veṅkaṭarañgācāryār of Viśākhapaṭṭanam, Vizagapatam District.
Oppert II 3107. Property of Taḍakamalla Veṅkaṭakṛṣṇarāyar of Tiruvallikeṇi, Madras District.
Oppert II 4486. Property of Śaṅkarācāryasvāmimaṭha of Śṛṅgeri, Mysore.
Oppert II 6643. Property of P. Rañgācāryār of Kumbhaghoṇam, Tanjore District.
Oppert II 9890. Property of Subbarāmaśāstrī of Mahādānapuram, Trichinopoly District.
Oxford 769 (Wilson 539b). Ff. 49-55. Copied for Fitz-Edward Hall from a manuscript in the library of the Sehore school, which is purported to be copied from a manuscript in Nepal. Incomplete (Daśagītikā and Gaṇitapāda only).
Pheh 9 (see NCC).
PL, Buhler IV E 13. 6ff. Incomplete. Property of Hariśaṅkara Jośī of Ahmadābād.
Poleman 4669 (Library of Congress W 30) = Weber (A) 35, 10. 9 pp. Copied from Berlin 834. With the commentary of Bhūtiviṣṇu.
RAS (Add.) 13(c).
S01 9405.
S01 9929.
Sucindram 156 (see NCC).
Sucindram 157 (see NCC).
Tāmarakkāṭṭu Mana 59c (see NCC).
Trippūṇittura I 1054 (see NCC).
Viśvabhāratī 1352 (see NCC).

Editions:

Ed. H. Kern, Leiden 1875. With the *Bhaṭadīpikā* of Parameśvara. Based on IO 6271 and a now lost manuscript of Whish. Reprinted and translated into Hindī by Udaya Nārāyaṇa Singh, Madhurapur, Etawah 1906.

Ed. K. Sāmbaśiva Śāstrī (I and II) and Suranad Kunjan Pillai (III), *TSS* 101, 110, and 185, Trivan-

drum 1930, 1931, and 1957. With the *Bhāṣya* of Nīlakaṇṭha; omits the Daśagītikā. Based on two manuscripts at the University of Kerala and one belonging to the Rājā of Kilimanur.

Ed. Baladeva Mishra, Patna [1966]. With new Sanskrit and Hindī commentaries.

There is also an edition with vyākhyā in Malayālam script published at Trivandram; this is A2109 of the Mysore GOL.

Translations:

Anonymous, *Zīj al-Arjabhar* (*ca.* 800). Arabic.
Anonymous. 1860. Marāṭhī (see Bombay U. 334).
L. Rodet [1879b]. (Gaṇitapāda only). French.
G. R. Kaye [1908a]. (Gaṇitapāda only). English.
Baidyanath Rath Sastri, Chicago 1925 (unpublished thesis). English.
P. C. Sengupta [1927b]. English.
Walter Eugene Clark, Chicago 1930. English.

Discussions:

C.M. Whish [1827a]; F.-E. Hall [1860]; W. D. Whitney [1860]; H. Kern [1863]; Bhāu Dājī [1865] 392-406 and 413-414; Y. Sarkār [1878]; L. Rodet [1880]; S. Dvivedin [1892] 2-7; S. B. Dikshit [1896] 190-210; G. Thibaut [1899] 54-55; T. R. Pillai [1905]; G. R. Kaye [1908a]; [1909/10]; J. F. Fleet [1911a]; [1911f]; L. D. S. Pillai [1911] 2, 6, 8, 16-20(b), and 48-75; N. K. Mazumdar [1911/12]; J. F. Fleet [1915b]; P. C. Sengupta [1920/21]; R. Sewell [1921/22]; [1923/24a]; G. R. Kaye [1924]; A. A. K. Ayyangar [1926]; B. Datta [1926b]; S. K. Ganguly [1926b]; [1926c]; B. Datta [1927c]; S. K. Ganguly [1927a]; P. C. Sengupta [1929]; S. K. Ganguly [1930]; B. Datta [1932b]; P. K. Gode [1938]; S. N. Sen [1963]; and S. Prakash [1965] 419-449.

The first verse in the Gaṇitapāda is:

brahmakuśaśibudhabhṛguravikujagurukoṇabhagaṇān namaskṛtya/
āryabhaṭas tv iha nigadati kusumapure ʾbhyareitaṃ jñāṇam//

The tenth in the Kālakriyā is:

ṣaṣṭyabdānāṃ ṣaṣṭir yadā vyatītās trayaś ca yugapādāh/
tryadhikā viṃśatir abdās tadeha mama janmano ʾtītāḥ//

And the fiftieth in the Golapāda is:

āryabhaṭīyaṃ nāmnā pūrvaṃ svayambhuvaṃ sadā satyam/
sukṛtāyuṣoḥ praṇāśaḥ kurute pratikañcukaṃ yo ʾsya//

2. The ārdharātrika system. This system was expounded in a now lost work which was utilized by Bhāskara (*fl.* 629) and Brahmagupta (*fl.* 665); it probably also preceded and influenced the version of the *Sūryasiddhānta* produced by Lāṭadeva (*fl.* 505). For its parameters see P. C. Sengupta [1930]. For its influence on the Sasanian and Islamic astronomy, see E. S. Kennedy [1958]; and D. Pingree [1962]; [1968a]; and [1968b].

ĀRYABHAṬA (*fl.* between *ca.* 950 and 1100)

Āryabhaṭa is the author of a *Mahāsiddhānta*=*Āryasiddhānta* which, besides summarizing a lost work of Parāśara, is alleged to depend on Śrīdhara (*fl.* between 850 and 1050) and is referred to by Bhāskara (b. 1114). Since the manuscripts are all from Gujarat, Rajasthan, Uttar Pradesh, and Bengal, it may be that Āryabhaṭa was a northerner. His work contains 18 adhyāyas in two sections:

A. grahagaṇitādhyāya
1. madhyamādhyāya. (61 vss.)
2. pārāśaramatādhyāya (17 vss.)
3. spaṣṭādhikāra (41 vss.)
4. tripraśnādhikāra (51 vss.)
5. candragrahaṇādhyāya (17 vss.)
6. sūryagrahaṇādhikāra (15 vss.)
7. śṛṅgonnatyadhikāra (8 vss.)
8. chedyakādhikāra (12 vss.)
9. udayāstādhikāra (8 vss.)
10. grahacchāyādhikāra (8 vss.)
11. grahayutyadhikāra (11 vss.)
12. bhagrahayutyadhikāra (13 vss.)
13. pātādhikāra (14 vss.)

B. golādhyāya (=golādhikāra)
14. praśnādhikāra (57 vss.)
15. pāṭyadhyāya (120 vss.)
16. bhuvanakośapraśnottarādhyāya (46 vss.)
17. praśnottarādhikāra (62 vss.)
18. kuṭṭakādhyāya (70 vss.)

For discussions see: F.-E. Hall [1860]; S. B. Dikshit [1896] 230-234; G. R. Kaye [1910a] 289-292; J. F. Fleet [1912b]; and B. Datta [1926b]; and [1927c].

Manuscripts:

Benares (1963) 35747. Ff. 1-18 and 21-25. Copied in Saṃ. 1656=A.D. 1599. Incomplete (Golādhyāya only).
Bombay U 327. 28ff. Copied in Śaka 1576=A.D. 1654. From Gujarat (see Bhāu Dājī [1865] 398, who reads Śaka 1676=A.D. 1754).
Cambridge R.15.99. 41ff. Copied in 1814.
Oxford 770 (Wilson 538). 40 pp. Copied for Fitz-Edward Hall on Sunday 3 śuklapakṣa of Śrāvaṇa in Saṃ. 1890=29 July 1832 from a manuscript belonging to Bāpū Deva Śāstrin of Benares, which was copied on 13 kṛṣṇapakṣa of Bhādrapada in Saṃ. 1872=*ca.* 12 Sept. 1814 (see Cambridge R.15.99).
Bombay U 325. 14ff. Copied in Śaka 1782=A.D. 1860 (see Paris BN 983).
Paris BN 983 (Sans. Dév. 278) II. 18ff. Copied for Bhāu Dājī on Tuesday paurṇimā of Phālguna in Śaka 1782=6 March 1860 (see Bhāu Dājī [1865] 398,

who reads Śaka 1762 = A.D. 1840). Presented to BN by J. Mohl.
Baroda 9310. 31ff. Copied in Śaka 1784 = A.D. 1862.
Bombay U 326. 30ff. Copied in Śaka 1785 = A.D. 1863 from a manuscript written in Śaka 1767 = A.D. 1845 (should one read Śaka 1676 = A.D. 1754? see Bombay U 327).
Baroda 3102. 38ff. Copied in Śaka 1791 = A.D. 1869.
Bombay U 328. 55ff. Copied in Śaka 1791 = A.D. 1869.
AS Bengal 6828 (G 4178). 51ff.
AS Bengal 6829 (G 968) = Mitra, Not. 1568. 37ff.
AS Bengal 6830 (G 7871). 38ff.
Baroda 9835. 17ff.
Berlin 1731 (or. fol. 981e). 45ff.
BORI 5 of 1869/70. 46ff.
Calcutta Sanskrit Coll. 16. 22 ff. Incomplete (Golādhikāra only).
Oxford 771 (Wilson 539a), Ff. 1-48. Copied for Fitz-Edward Hall from a manuscript in the library of the Sehore school which was copied from a manuscript in Nepal. Incomplete (ends at sixth verse of adhyāya 15).
SOI 9373. Incomplete (Golādhyāya only).

The *Mahāsiddhānta* was edited with his own Sanskrit commentary by MM. Sudhākara Dvivedin, *BSS* 148-150, Benares 1910 on the basis of four manuscripts: (1) one brought by Vināyaka Śāstrin from Udayapura to Benares, which was copied in Sam. 1950 = A.D. 1893 from a manuscript copied by Govinda on Wednesday 11 śuklapakṣa of Kārttika in Śaka 1567 = 30 October 1644; (2) a manuscript in the Asiatic Society of Bengal (AS Bengal 6829?); (3 and 4) two manuscripts of his own.

The first verse of adhyāya 1 is:

vividhakhagāgamapāṭīkuṭṭakabījādidṛṣṭaśāstreṇa/
āryabhaṭena kriyate siddhānto rucira āryābhiḥ//

The last two verses of adhyāya 13 are:

evaṃ paropakṛtaye svoktyoktaṃ khecarānayanam/
kiñcit pūrvāgamasamam uktaṃ viprāḥ paṭhantv idaṃ nānye//
vṛddhāryabhaṭaproktāt siddhāntād yan mahākālāt/
paṭhair gatam ucchedaṃ viśeṣitaṃ tan mayā svoktyā//

ĀRṢṬIṢEṆA (*fl.* before 1400)

An authority on astrology who is first cited by Śivarāja (*fl.* between 1400 and 1480) in his *Jyotirnibandha.*

ĀŚĀDHARA

Author of a *Jātakavallī.* Manuscripts:

VVRI 6927. 10ff. Copied in Saṃ. 1861 = A.D. 1804.

Verse 383 is:

guruprasādaṃ samavāpya samyagvijñātatattvaḥ sakalāgamānām/
āśādharaḥ sarvavidāṃ variṣṭhaś cakre kavir jātakakalpavallīm//

ĀŚĀDHARA (*fl.* 1132).

The son of Rihluka, the son of Vatsa, the son of Viṣṇu, the son of Bhānu of the Mudgalagotra, Āśādhara wrote a *Grahajñāna = Grahagaṇita = Brahmatulyānayana = Bhaumādipañcagrahānayana = Kṣaṇikagrahānayana = Āśādhara* in 30 verses with tables based on the *Brāhmasphuṭasiddhānta* (628) of Brahmagupta in Śaka 1054 = A.D. 1132; it is possible that his father Rihluka is identical with the Rīhlīya cited by Āmarāja (*fl. ca.* 1200) in his commentary on the *Khaṇḍakhādyaka.* An expanded version of the *Grahajñāna* was written by Harihara (*fl. ca.* 1575). Manuscripts:

IO 2922 (2464b). 5ff. Copied by Nīlakaṇṭha, the son of Nārāyaṇa of the Girinārāyaṇa family on Monday 13 kṛṣṇapakṣa of Āṣāḍha in Saṃ. 1694, Śaka 1559 = 10 July 1637. From Gaikawar.
IO 2923 (2464c). 5ff. Copied by Josī Vidyādhara of the Girinārāyaṇa family in *ca.* 1650. (*Grahasāriṇī* only). From Gaikawar.
RORI Cat. I 257 = RORI 257. 1 f. Copied in Saṃ. 1708 = A.D. 1651. *(Bhaumādigrahaspaṣṭavidhi).*
Baroda 7635(a). 1 f. Copied in Saṃ. 1833 = A.D. 1776. (*Kṣaṇikagrahānayanavyākhyā!* of Āśādhara Tripāṭhin).
Ānandāśrama 5417. *(Āśādhara).*
Anup 4946. 2ff. *(Bhaumādipañcagrahānayana).*
Dāhilakṣmī XXXIII 59 (see NCC, vol. 2, p. 193). *(Brahmatulyānayana).*
LDI 6674 (5780). 1 f. (*Āśādhara* of Ihlaka!).
PL, Buhler IV E 63. 4ff. Property of Mayādhara Muralīdhara of Mehmadābād. *(Grahagaṇita).*
RAS (Tod) 36c. 17ff.

The first verse and a half are:

brahmeśācyutacandravitsitaravikṣoṇīsutejyārkajān
nakṣatrāṇi sarasvatīṃ gaṇapatiṃ natvā pṛthag bhaktitaḥ/
śrībrahmoktaparisphuṭopakaraṇair bhaumādayo yādṛśās
tattulyānayanaṃ bravīmi sukhadaṃ mandāśupātair vinā//
śāko)bdhibāṇadaśabhir viyuto)hato)śvibāṇaiḥ pṛthak śaśinavāṣṭanṛpāptahīnaḥ/

Verses 28-30 are:

āsīd ṛṣiḥ sannihitādhivāsī śrīmudgalo brahmavidāṃ variṣṭhaḥ/
tasyānvaye vedavidāṃ variṣṭhaḥ śrībhānunāmā ravivat prasiddhaḥ//
tasyotpannaḥ prathamatanayo viṣṇunāmā manīṣī
vede śāstre)pratihatamatis tasya putro babhūva/
śrīvatsākhyo dhanapatir asau kalpavṛkṣopamānas
tasyaiko)bhūt pravaratanayo rihlukākhyaḥ sa vidvān//
tasyādyasūnur gaṇakābjabhānur āśādharo viṣṇupadāmbusaktaḥ/
vedottamāṅgaṃ bahuśāstrasāraṃ cakāra daivajñahitāya śāstram//

ĀŚĀNANDA

Author of a *Siddhāntasāra*. Manuscripts:

LDI (LDC) 4112. 44ff. (Āsānanda).

ICCHĀRĀMA

Author of a *Pallīsaraṭavicāra*. Manuscripts:

IM Calcutta 1238 (see NCC, vol. 2, p. 245).

INDRA

First cited as an authority on astrology by Varāhamihira (*fl. ca.* 550) in his *Bṛhatsaṃhitā* (85,1). This is perhaps the I.n.d.y (reading I.n.d.r) of Ibn al-Nadīm (*Fihrist*, p. 271 Flügel).

INDRAJIT

Author of a work on divination by letters, the *Indrajitkeralī*, in 207 verses. Manuscripts:

Mitra, Not. 2240. 18ff. Bengālī. Property of Rāmacandra Bhaṭṭācārya, Brāhmaṇīkuṇḍā, Zillā Rāṅgpur.

INDRADATTOPĀDHYĀYA

The son of Kṣemāvatīdevī and of Lālamaṇi Upādhyāya, the son of Mohanalāla, the son of Muralīdhara of the Gargagotra, Indradatta wrote, among other works, a commentary (dīdhiti) on the *Jyotiṣaratnamālā* of Śrīpati (*fl.* 1040). Manuscripts:

AS Bengal 2680 (see NCC, vol. 2, pp. 251-252).

INDRAVĀMADEVA

Jaina author of a *Trailokyadīpaka* based on the *Trailokyasāra* of Nemicandra (*fl.* ca. 975). He wrote this for Nemideva of the Puravāṭa (i.e., Prāgvāṭa) family. It contains three adhikāras:

1. adholakavyāvarṇana (206 vss.)
2. madhyalokavyāvarṇana (616? vss.)
3. (description of the upper world) (425 vss.)

Manuscripts:

BORI 603 of 1875/76. 86ff. Copied in Saṃ. 1793 = A.D. 1736. From Jaipur.
BORI 506 of 1884/86. 82ff.
BORI 942 of 1892/95. 81ff.
BORI 740 of 1899/1915. 22ff.
Chani 698. Property of Kantivijayaji Maharaj of Chani, near Baroda (see Velankar p. 165).
CP, Hiralal 7364. Property of the Senagaṇa Jain mandir at Kārañjā, Akolā District.
CP, Hiralal 7365. Property of Balātkāragaṇa Jain mandir at Kārañjā, Akolā District.
CP, Hiralal 7366. Property of Balātkāragaṇa Jain mandir at Kārañjā, Akolā District.
Florence 460. 96ff.
Hamsa 31. Property of Hamsavijayaji Maharaj; at Kantivijaya Bhandar at Baroda (see Velankar).
Idar A. 19. Property of the Digambar Bhandar at Idar, Ahmadabad District (see Velankar).
IO 7530 (2583). 85ff. From Colin Mackenzie.
Lal. 79. Property of the Lalitakīrti Bhandar at Ajmer (see Velankar).
Lal. 336. Property of the Lalitakīrti Bhandar at Ajmer (see Velankar).
Mysore and Coorg 2884. 2000 granthas. Karṇāṭakī. Property of the Jaina Maṭha, Śravaṇa Belgoḷa. Incomplete.
SG 24. Property of the Pannalal Jain Sarasvati Bhavana at Bhuleśvara, Bombay (see Velankar).
SG 2022. Property of the Pannalal Jain Sanskrit Bhavana at Bhuleśvara, Bombay (see Velankar).
Tera 12. Property of the Tera Panthi Bada Bhandar at Jaipur (see Velankar).
Tera 13. Property of the Tera Panthi Bada Bhandar at Jaipur (see Velankar).
Tera 20. Property of the Tera Panthi Bada Bhandar at Jaipur (see Velankar).

Verses 8-9 of the first adhikāra are:

puravāṭavaṃśabhūṣaṇajotanayasya nemidevasya/
abhyarthanayārabdho grantho 'yaṃ bhavyabodhāya//
atha pañca gurūn natvā vakṣya saṃskṛtabhāṣayā/
trailokyasāram ālokya granthaṃ trailokadīpakam//

The first two colophons read: itīndravāmadevaviracite puravāṭavaṃśaviśeṣakaśrīnemidevasya yaśaḥprakāśake trailokapradīpake . . . .

ĪŚĀNADATTA

See Nāhnidatta.

ĪŚVARA (*fl. ca.* 1375)

Author of a *Karaṇakaṇṭhīrava* or *Karanakesarī* composed at Kollamburapura under Fīrūz Shāh (1351-1388). Manuscripts:

Anup 4456. 26ff. Copied by Lakṣmīdhara in Śaka 1465 = A.D. 1543.

ĪŚVARADĀSA (*fl.* 1663)

The son of Jyotiṣarāya Keśavaśarman, the son of Kaṃharaśarman of the Vatsagotra, Īśvaradāsa belonged to a family of Kānyakubja Brāhmaṇas residing at Kāliñjara in Bundelkhand. He completed his *Muhūrtaratna* in 27 chapters on Sunday 11 śuklapakṣa of Kārttika in Śaka 1585 = 1 November 1663. See M. M. Patkar [1938a] and [1938b] 174. The chapters are:

1. saṃvatsara
2. tithi
3. vāra
4. nakṣatra
5. yoga
6. karaṇapraviṣṭi
7. muhūrta
8. upagraha
9. saṅkrānti
10. gocara
11. candratārādisthala

12. lagna
13. saṃskāra
14. samayaśuddhi
15. mahādoṣanirūpaṇa
16. vratabandha
17. samāvarttana
18. churikā
19. vivāha
20. vadhūpraveśa
21. rājyābhiṣeka
22. yātrā
23. vāstu
24. gṛhapraveśa
25. devapratiṣṭhā
26. Genealogy of Aurangzeb (1659-1707)
27. svasthānagotravarṇana

Manuscripts:

Kathmandu (1960) 330 (I 1173). 154ff. Nevārī. Copied on 14 śuklapakṣa of Jyeṣṭha in Nepāla Saṃ. 861 = 27 May 1740.
BORI 842 of 1884/87. 148ff. (f. 147 missing). Copied in Saṃ. 1868 = A.D. 1811. From Gujarat.
Benares (1963) 36408. 84ff. Copied in Saṃ. 1885 = A.D. 1828.
Alwar 1909. Two copies.
Anup 4998 = Bikaner 686. 66ff.
AS Bengal 2724 = Mitra, Not. 1694. 84ff.
BORI 177 of A 1883/84. 69ff.
CP, Hiralal 4300. Property of Ayodhyābhaṭṭa of Hardā, Hoṣaṅgābād District.
Dāhilakṣmī XXXIII 14 (see NCC, vol. 2, p. 275).
LDI (LDC) 4666. 68ff.
Tokyo U 325. Ff. 1 and 31. Nevārī.

The first five verses of the twenty-seventh chapter are:

kāliñjaragirau ramye kānyakubjadvijāgraṇīḥ/
vātsyaḥ kaṃharaśarmāsīd yajñakṛd vedapāragaḥ//
tasmāt keśavaśarmābhūt khyātas triskandhavigramaḥ/
gajāśvarathasaṃgrāmair yo 'rcitaḥ syān nṛpottamaiḥ//
so 'yaṃ jyotiṣarāyākhyo jahāṅgīrāvanīpateḥ/
svagūḍhapraśnasaṃvādair lebhe praśnavidāṃ varaḥ//
tulāpramukhadāneṣu yas tv asaṃkhyavasūni vai/
viprasāskṛtavān kāle nārāyaṇaparāyaṇaḥ//
tajjas tv īśvaradāsākhyo vyavahāravidāṃ mude/
granthaṃ muhūrtaratnākhyaṃ kṛtvā cakre śivārpaṇam//

The last verse is:

pañcāṣṭavāṇendugate śakābde viṣṇuprabodhe 'hani sūryavāre/
saṃpūrṇam āsīt tu muhūrtaratnaṃ prasthe maghonas tv avarāṅgarājye//

ĪŚVARAMIŚRA (= *ĪŚVARA*)

Author of a commentary, *Dīpikā*, on the *Laghujātaka* of Varāhamihira (*fl. ca.* 550). Manuscripts:

Benares (1963) 35277 = Benares (1897-1901) 841. Ff. 1 and 3-67. Copied in Saṃ. 1828 = A.D. 1771. Incomplete (only on adhyāya 13; rest by Bhaṭṭotpala).
IO 3071 (1122c). 36ff. Copied by Agnihotrin Śivadatta in 1799. From H. T. Colebrooke.
IO 3072 (2295). 33ff. Copied from IO 3071 in 1813. From Calcutta.
VVRI 1356. 31ff. Copied in Saṃ. 1879 = A.D. 1822. The *Laghujātaka* is ascribed to Īśvara, the *Dīpikā* to Bhaṭṭotpala.
AS Bengal 7278 (G 5554). 34ff. Copied by Vidyādhara on Wednesday 7 Māgha Saṃ. 1914 = 20 January 1858.
Oudh XIX (1887) VIII 1. 48 pp. Copied in 1872. Property of Gaṅgādhara Vājapeyin of Unao Zila.
LDI (LDC) 3316/1. 21ff. Copied in Saṃ. 1932 = A.D. 1875.
Oudh XIX (1887) VIII 2. 80ff. Property of Śaktidhara of Hardoi Zila.
Udaipur II 186, 19. Property of the Library of Nāthadvāra, Udaipur (see NCC, vol. 2, p. 273).

The concluding verse of the *Dīpikā* is:

laghujātakabhāvārthadīpikā tv īśvaroditā/
ādhānaprasavāriṣṭayogādīnāṃ prakāśikā//

UTTAMANĀTHA

Author of a *Jyotiṣasaṅgraha* or *Laghusaṅgraha*. Manuscripts:

Allahabad 27 (see NCC, vol. 2, p. 298) *(Jyotiṣasaṅgraha)*.
Benares (1963) 36525. 33ff. *(Laghusaṅgraha)*.

UTTAMAVIJAYA

Author of a *Pañcavākyiśakunāvali* in Gujarātī. Manuscripts:

LDI (MPC) P/8263. 5ff. Copied in Saṃ. 1881 = A.D. 1824.

UTPALA

See Bhaṭṭotpala (*fl.* 966).

UDAYADIVĀKARA (*fl.* 1073)

Known as Jyautiṣikabhaṭṭa, Udayadivākara was the author of a commentary, *Sundarī*, on the *Laghubhāskarīya* of Bhāskara (*fl.* 629). Manuscripts:

Baroda 13330. 92ff. Grantha.
Kerala—(GD 942). 50ff. Malayālam (see S. N. Sen [1966] 230).
Kerala—(GD 943). 92ff. Malayālam (see S. N. Sen [1966]).
Kerala—(GD 944). 120ff. Malayālam (see S. N. Sen [1966]).
Kerala—(GD 945). 160ff. Malayālam (see S. N. Sen [1966]).
Kerala—(GD 977). 143ff. Malayālam (see S. N. Sen [1966]).

Kerala—(TCD 761) (see NCC, vol. 2, p. 326).
Kerala—(TCD 762) (see NCC).
Lucknow. Manuscript formerly belonging to A. N. Singh (see K. S. Shukla, ed., *Laghubhāskarīya,* Lucknow 1963, p. i).

UDAYAPRABHA SŪRI (*fl.* 1221/43)

A Jaina of the Nāgendragaccha, Udayaprabha was the pupil of Vijayasena (died 1245; see B. J. Sandesara [1953] 69-70), the pupil of Haribhadra, the pupil of Ānanda and Amaracandra who were contemporaries of Jayasiṃha Siddharāja (*fl. ca.* 1093-1143) and pupils of Śāntisūri, the pupil of Mahendraprabhu (see BORI 1886/92, pp. xiii-xiv) and a member of the literary circle of Vastupāla (died 1 January 1240) who was minister from 1220 to the Vāghelas Lavaṇaprasāda and Vīradhavala (died 1238). Udayaprabha wrote many poems, praśastis, and commentaries between 1221 and 1243; the details are given in B. J. Sandesara [1953] 71-72 *et passim.* Two of his praśastis of Vastupāla can be found in *Sukṛtakīrtikallolinyādi Vastupālapraśastisañgraha, SJS* 5, 1961, pp. 1-20; his *Dharmābhyudaya* is edited in *SJS* 4, Bombay 1949. His work on astrology is entitled *Ārambhasiddhi=Pañcavimarśa* in 412 verses and 5 chapters. Aside from anonymous commentaries, an avacūrṇi was written by Samayaratna Gaṇi and a vārttika by Hemahaṃsa Gaṇi (*fl.* 1458). Manuscripts:

LDI 6667 (5310). 9ff. Copied in Stambhatīrtha in Saṃ. 1480=A.D. 1423.
LDI 6668 (3241). 8ff. Copied in Mūñjigapura in Saṃ. 1488=A.D. 1431.
BORI 1354 of 1891/95. 8ff. Copied in Saṃ. 1500=A.D. 1443.
Anup 4818. 15ff. Copied by Harṣakīrti in Sam. 1637=A.D. 1580. *(Pañcavimarśa).*
BM 485 (Or. 2139). 222ff. Copied by Sāmala Tejasāgara in Dhanadapura on Wednesday in kṛṣṇapakṣa of Śrāvaṇa in Saṃ. 1638=July/August 1581. With the vārttika of Hemahaṃsa.
PL, Buhler IV E 11. 166ff. Copied in Saṃ. 1639=A.D. 1582. Property of Uttamarāma Jośi of Ahmadābād.
Benares (1963) 37093. Ff. 16-34. Copied in Saṃ. 1649=A.D. 1592.
RORI Cat. I 3448=RORI 3448. 118ff. Copied on Saturday 6 śuklapakṣa of Caitra in Saṃ. 1662=16 March 1605. With the vārttika of Hemahaṃsa.
BM 487 (Or. 5199)=Jacobi. 14ff. Copied by Nayavijaya Gaṇi and dedicated by his pupil, Jasavijaya, in Saṃ. 1665=A.D. 1608.
Florence 279. 10ff. Copied in Saṃ. 1680=A.D. 1623.
LDI* (LDC) 4921. 16ff. Copied in Saṃ. 1714=A.D. 1657.
Baroda, Pra. Śrī. Kāṃ. Vi. Saṃ. Śāstra Sañgraha. Copied by Rāghava, the son of Govyanda, for muni Saubhāgya in Saṃ. 1715=A.D. 1658 (see Praśasti (1), vol. 2, p. 222).
Surat, Jaina Ānanda Pustakālaya. Copied by Mānavijaya muni, a companion of Kāntivijaya and of Harṣavijaya Gaṇi, and a pupil of Guṇavijaya Gaṇi, in Saṃ. 1727=A.D. 1670 (see Praśasti (1), vol. 2, p. 239).
LDI 6669 (1017). 134ff. Copied in Saṃ. 1964=A.D. 1907. With the vārttika of Hemahaṃsa.
LDI (LDC) 3870. 126ff. Copied in Saṃ. 1964=A.D. 1907. With the vārttika of Hemahaṃsa.
Agra 2997-2999 (3 MSS). Property of the Vijayadharma Lakṣmī Jñānamandira at Belan Ganj, Agra (see Velankar, p. 31).
Ahmadabad, Bhandar of the Vimala Gaccha Upasraya 1 (17) and 3 (7; 15; 42; and 43) (5 MSS.) (see Velankar).
AS Bengal 6980 (G 7026). Ff. 1-18 and 20. Incomplete.
AS Bengal Jaina 7606.
Baroda 2728. 166ff. With the vārttika of Hemahaṃsa.
Baroda 2729. 150ff. With the vārttika of Hemahaṃsa.
Baroda 7194. 12ff. With the vārttika of Hemahaṃsa. Incomplete.
Berlin 1741 (or. fol. 679). 154ff. With the vārttika of Hemahaṃsa.
Bikaner, Mahimabhakti Bhandar 69 (see Velankar).
BM 486 (or. 2140a). 9ff. With an avacūrṇi (of Samayaratna Gaṇi ?).
Bombay, Seth Manekchand 32 (see Velankar).
BORI 399 of 1871/72. 70ff. With the vārttika of Hemahaṃsa.
BORI 410 of 1871/72. 19ff. Incomplete *(Pañcavimarśa).*
BORI 1338 of 1884/87. 98ff. With a ṭīkā (of Hemahaṃsa ?).
BORI 874 of 1886/92. 9ff.
BORI 769 of 1895/1902. 138ff. With the vārttika of Hemahaṃsa.
BORI 770 of 1895/1902. 92ff. With the vārttika of Hemahaṃsa.
Chāṇi, Śvetāmbara Jñāna Mandira 87; 320; 997; 1028; 1363; 1540; 2044; 3105; 4012 (nine MSS.) (see NCC, vol. 2, p. 137).
Chāṇi, Kantivijaya Maharaj 990 (see Velankar).
Dāhilakṣmī XIX 15 (see NCC).
Dela Upāśraya Bhandar, Ahmadabad (ground floor) 67 (30-32; 76) (3 MSS.) (see Velankar).
Dela Upāśraya Bhandar, Ahmadabad (first floor) 24 (155-159) (5 MSS.) (see Velankar).
Florence 280. 9ff.
Florence, Jain II.i.2 (see NCC).
Idar 156. Property of the Digambar Bhandar. (*Lagnaparīkṣā* only) (see Velankar).
Jain Bhandars of the Panjab I 209-211 (3 MSS.) (see NCC).
Jaipur, Inner Bhandar of Harisāgaragaṇi 59 (2c) (see Velankar).
Jaipur, Bhagavandas Jyotisi (see Velankar).
LDI 6666 (5996/1). Ff. 1A-6A.
LDI 6670 (8880). Ff. 3-154. With vārttika of Hemahaṃsa.
LDI 6671 (5893). 19ff. With vṛtti.

LDI (LDC) 4751. Ff. 111-121. With vṛtti.
Leumann 61 (fragment).
Leumann 111. 1f. (extracts from BM 485 and 486).
Oxford 1541 (Sansk. d 184) = Hultzsch 279. 20ff.
Oxford 1542 (Sansk. d 183) = Hultzsch 278. 3ff.
Pattan, Agali Sheri 49, 22 (see Velankar).
Pattan, Khetaravasī Bhandāra 18 (1). Ff. 2-120. Incomplete (Pattan p. 279).
Pattan, New Sangha Bhandar 3, 6 (see Velankar).
Pattan, Pophliāno Pāḍo 41, 6. 104ff. (BORI 1883/84 p. 185).
Pattan, Pophliāno Pāḍo 41 mo, 69. 143ff. (BORI 1883/84 p. 241).
Pattan, Pophliāno Pāḍo 41 mo, 70. 9ff. (BORI 1883/84 p. 241).
Pattan, Pophliāno Pāḍo 49 mo, 49. 22ff. (BORI 1883/84 p. 248).
Pattan, Pophliāno Pāḍo 49 mo, 51. 89ff. (BORI 1883/84 p. 248).
Pattan, Sangha Bhandar 73, 17 (see Velankar).
Pattan, Sangha Bhandar 79, 46 (see Velankar).
Poleman 4946 (Smith Indic M.B.) XLII 1f. (see SATIUS p. 30b).
Poleman 4958 (Harvard 1012). Ff. 2-30 (31) and 32-144. With vārttika of Hemahaṃsa.
RORI Cat. I 3449 = RORI 3449. Ff. 1-3 and 5-9. Incomplete (*Lagnaparīkṣā* only).
RORI Cat. II 5927 = RORI 5927. 14ff. With avacūri.
RORI Cat. II 5938 = RORI 5938. 97ff. With vārttika of Hemahaṃsa.
RORI Cat. II 8598. Ff. 2-50. With vārttika of Hemahaṃsa.
Surat, Adinatha Temple Library (see Velankar).
Surat, Devchand Lalbhai Pustakoddhar Fund Library (see Velankar).
Surat, Jainānanda Bhandar 108 and 210 (2 MSS.) (see Velankar) (one of these is the manuscript dated A.D. 1670).
Surat, Mohanlal Bhandar 2 (165) (see Velankar).
Wien (Univ) 95. (= Vienna 15? see NCC).
Viśvabhāratī 1497 (see NCC).

The *Ārambhasiddhi* was published by the Nirṇayasāgara Press, Bombay 1918 (IO San. D. 134), and by the Jain Śāsana Press, Bhavnagar (N.D.) (see Velankar). Both editions include the vārttika of Hemahaṃsa.

UDAYASĀGARA

Jaina author of a commentary *(Bālāvabodha)* on the *Kṣetrasamāsa* of Ratnaśekhara Sūri (see Velankar p. 100).

UDAYĀDITYA

Author of an udāharaṇa on a *Yantracintāmaṇi*. Manuscripts:

LDI 7155 (1264). 13ff.

UDUMBARA MAHĀDEVA

See Mahādeva (*fl.* 1876).

UPAYOGIN (?)

Author of a work called simply *Jyotiṣa*. Manuscripts:

DC 1758. 2ff.

UPENDRA (*fl. ca.* 1525)

The son of Lakṣmīdāsa Miśra (*fl.* 1501), the son of Vācaspati Miśra, the son of Keśava of the Upamanyugotra, Upendra wrote a *Śakunapradīpacūḍāmaṇi* in 7 adhyāyas. Manuscripts:

RORI Cat. II 4657 = RORI 4657. 12ff. Copied by Chabīlārāma at Argalāpura on Sunday 8 kṛṣṇapakṣa of Jyeṣṭha in Saṃ. 1799 = 13 June 1742.

The colophon reads: iti śrīśākulavarddhanaśrīvācaspatisuputraśrīmiśralakṣmīdāsātmajopendraviracite śakunapradīpacūḍāmaṇau. . . .

UPENDRĀCĀRYA

Author of an astrological text entitled *Jinendramālā* which was translated into English by N. Chidambaram Iyer, Madras 1890 (Emeneau 3167).

UMĀNĀTHA

Author of a *Praśnapārijāta*. Manuscripts:

Mithilā (see NCC, vol. 2, p. 390).

UMĀPATI

Author of a ṭīkā on the *Jyotiṣaratnamālā* of Śrīpati (*fl.* 1040). Manuscripts:

N-W P I (1874) 189. 25ff. Property of Gaṇeśa Rāma of Benares.

UMĀŚAÑKARA

Author of a *Jyotiṣārṇava*, published in Bombay; a copy is B 1683 in the Mysore GOL.

UMĀSVĀTI VĀCAKA (*fl.* first century A.D.)

This famous Jaina author, born at Nyagrodhikā to Svāti and Vātsī and known as Gṛddhrapiccha, composed at Pāṭaliputra among other works a *Tattvārthādhigamasūtra*, of which chapters 3 and 4 deal with cosmography and geography, and a *Kṣetrasamāsa* = *Jambūdvīpasamāsa* on the same subjects. Manuscripts and commentaries will be found listed in Velankar along with the editions (pp. 154-157 for the *Tattvārthādhigamasūtra*, pp. 98 and 131-132 for the *Kṣetrasamāsa* = *Jambūdvīpasamāsa*). Umāsvāti is mentioned here because of his having been used by W. Kirfel [1920] 208-339 and in various articles by B. Datta. There are commentaries on the *Kṣetrasamāsa* by Vijayasiṃha (*fl.* 1158) and on the *Tattvārthādhigamasūtra* by Umāsvāti himself (Velankar p. 155), Vādigajagandhahastin Siddhasena Divākara, Siddhasena Gaṇi, Haribhadra and Yaśobhadra, Nāgara Vācaka, Malayagiri, Yaśovijaya Upādhyāya, Samantabhadra, Devanandin Pūjyapāda, Akalaṅka, Padmanābha, Vidyānandin,

Yogadeva, Prabhāeandra, Śrutasāgara, Bālaeandra, Jayanta Paṇḍita, Bhāskaranandin, Kamalakīrti, Divākarabhaṭṭa, Māghanandin, Vibudhasena, Lakṣmīdeva, Śubhaeandra, Yogīndradeva, Devīdāsa, Ravinaṅda, Padmakīrti, Kanakakīrti, Rājendra Maulin, Śivakoṭi, Ratnasiṃha, and Prabhāeandra.

UŚANAS

See Bhṛgu.

ṚṢABHA

An astrologer mentioned by Varāhamihira (*ca.* 550) (*Bṛhatsaṃhitā* 85,1) as having summarized the views of Śakra (=Indra), Śukra (=Bhṛgu), Vāgīśa (=Bṛhaspati), Kapiṣṭhala, Garutmān, Bhāguri, and Devala on śakuna:

yae ehakraśukravāgīśakapiṣṭhalagarutmatām
matebhyaḥ prāha ṛṣabho bhāgurer devalasya ea

See P. V. Kane [1948/49] 15.

ṚṢI

Presumably the eorreet transliteration of the Arabie A.r.s.ā, an astrologer frequently eited in texts of the late eighth eentury and of the ninth.

ṚṢIPUTRA

An astrologer first mentioned by Varāhamihira (*ca.* 550), and one whose ślokas are often eited by Bhaṭṭotpala (*fl.* 966) and others. See P. V. Kane [1948/49] 15-16. He quotes Atri, Parāśara, Vasiṣṭha, Añgiras, Garga, Devala, Bṛhaspati, Uśanas, Gautama, and Bhārgava. Aeeording to CC, vol. 1, p. 73 he is Krauṣṭhuki, the son of Garga and an interloeutor in the *Gargasaṃhitā*.

ṚṢIŚARMAN

Author of an astrologieal treatise entitled *Jñānamañjarī*. Is he the same as Gadādhara? Manuscripts:

LDI 6892 (4688). 11ff. Copied by Kalyāṇasurīndara in Jāvālapura for Labdhisundara in Saṃ. 1703=A.D. 1646 (*Jñānamañjarikevalikā* of Ṛṣīndra).
Anup 4665. 25ff. Copied by Udayakalyāṇa at Bīkānera in Saṃ. 1743=A.D. 1686.
Benares (1963) 36565=Benares (1897/1901) 603 A. 21ff. Copied in Saṃ. 1834=A.D. 1777 (date of copying not given in Benares (1963)).
RORI Cat. II 4464=RORI 4464. 26ff. Copied by Govardhananātha at Jayapura during the reign of Jayasiṃha III (1819-35) in Saṃ. 1878= A.D. 1821.
Benares (1963) 36455=Benares (1903) 1133. 22ff. Copied in Saṃ. 1884=A.D. 1827.
Poleman 4671 (U Penn 1729). 23ff. Copied in Saṃ. 1925=A.D. 1868. Ineomplete (ends with akṣarapraśnavidyā).
Anup 4664=Bikaner 648. 29ff. Owned (or eopied) by Pokaradāsa.
Anup 4666. 11ff. Ineomplete.
Baroda 8745. 9ff. Ineomplete.
Benares (1963) 35803=Benares (1913/14) 2334. 17ff. Ineomplete.
Benares (1963) 37364. Ff. 2-35. Ineomplete (ends with akṣarapraśnavidyā).
CP, Kielhorn XXIII 38. 21ff. Property of Anantarāma Vaidya of Sāgar.
Jammu and Kashmir 2911. 20ff. Copied from a manuseript written in Śaka 1750=A.D. 1828.
Jammu and Kashmir 2914. 2ff. Incomplete (through jīvabhedaprakaraṇa).
Kotah 295. 21 pp.
Kotah 314. 13 pp.
Oudh XX (1888) VIII 119. 40 pp. Property of Pratāpa Nārāyaṇa of Allahabad Zila.
SOI 6512=List 513.

The first verse is:

ajñānatimirāndhasya jñānāñjanaśalākayā/
eakṣur unmīlitaṃ yena tasmai śrīguruve namaḥ//

The eolophon in Poleman 4671 is: iti śrīṛṣiśarmāeāryaviraeitāyāṃ jñānamañjaryyāṃ

EKANĀTHA

Author of a *Muhūrtanicaya*. Manuseripts:

Benares (1963) 36848. Ff. 1-3 and 5-24.
Kavīndrāeārya 810 (no author mentioned).

EKANĀTHA

The son of Caṇḍika of the Kauṇḍinyagotra and resident of Vāripurī on the Godā (or Godāvaripurī?), Ekanātha wrote a *Gaṇakaprakāśa* based on the Brāhma, Ārya, and Saura pakṣas in 9 adhyāyas and 74 verses. The adhyāyas are:

1. dhruvakasiddhi (15 vss.)
2. pañeāñgasādhana (10 vss.)
3. grahaspaṣṭīkaraṇa (11 vss.)
4. lagneṣṭakālanatonnataearakhaṇḍaearasvadeśodayasādhana (17 vss.)
5. dvādaśabhāvasādhana (7 vss.)
6. candragrahaṇasādhana (5 vss.)
7. sūryagrahaṇasādhana (3 vss.)
8. valanaparilekhanādhyāya (3 vss.)
9. mahāpātādhyāya (3 vss.)

Manuseripts:

AS Bombay 228. 6ff. Copied (in 1865?) from a manuseript written on Friday 11 śuklapakṣa of Bhādrapada in Śaka 1543=17 August 1621. From Bhāu Dājī.
IIL Oxford Stein 261e (exliv). Ff. 4v-6. Śāradā.

The first verse is:

natvācyutatrinayanārkaśivāgaṇeśān
pañeāñgasūryaśaśiparvakhagaprasidhyai/

brahmāryasauramatatulyam ahaṃ karomi
khalv ekanāthagaṇako gaṇakaprakāśam//

The last verse reads:

āsīd kauṇḍinyagotre gaṇakagaṇavaraś caṇḍikākhyātanāmā
godāyāṃ varipuryāṃ sujanabudhajanair mānito bhūpapūjyaḥ/
tajjaḥ siddhāntasāragaṇakamatamataṃ caikanāthābhidhānaś
cakre tantraṃ vicitraṃ śiśumatitatidaṃ maṇḍanaṃ paṇḍitānām//

EKANĀTHA (*fl.* 1370)

The son of Śārṅga and the brother of Viṣṇu, Ekanātha apparently lived at Mahāṇḍanagara. He wrote a ṭīkā on the *Karaṇakutūhala* of Bhāskara (1183) in which he mentions Śaka 1286, 1288, 1290, and 1291 = A.D. 1364, 1366, 1368, and 1369. Manuscripts:

Baroda 9297. 76ff. Copied in Śaka 14(5)4 = A.D. 15(3)2. *(Brahmatulyabhāṣya)*
Leipzig 969. Ff. 2-7, 9-10, 12-33, and 51-88. Copied in 1647 by Jyotirvid Rāmacandra. Incomplete.
Baroda 11306. 36ff. Incomplete.
BORI 386 of 1884/86. 43ff.

ĀLUTŪRI (=*ALŪRU*) *EKĀMRA* (*fl.* 1858/65)

Editor of various *Purāṇas* and commentator in Telugu on Śaṅkara, Ekāmra wrote three works on jyotiḥśāstra:

1. *Abhayadapraśnaśāstra* in Sanskrit and Telugu. Manuscripts:

Adyar (2 cop.) = Adyar Index 291 = Adyar Cat. 9 C 145. 64ff.

Adyar Cat. 26 E 10. 66ff. Grantha.

This work was published in Madras 1860.

2. *Jātakacintāmaṇi* in Sanskrit. Manuscripts:

GOML Madras R 2647. 46ff.

This work was published in Telugu script in Madras 1889 (IO 22.BB.1).

3. *Gopālaratnākara* in Telugu. Published Madras 1864 and Madras 1865. He also wrote Telugu commentaries on the *Jātakacandrikā* of Veṅkaṭeśvara, his own *Gopālaratnākara,* the *Jātakakalānidhi* of Nṛsiṃha, and the *Jātakālaṅkāra* of Bhaṭṭoji Dīkṣita which, as revised by Kokaṇṭi Keśava Ācārya, were published with his *Gopālaratnākara.*

OṂKĀRA BHAṬṬA (*fl.* 1840/41)

Author of a *Bhūgolasāra* (=*Jyotiṣacandrikā*). Manuscripts:

PUL II 3745. 28ff. Copied in Saṃ. 1937 = A.D. 1880.

This was published at Agra in 1840. See also O. Bhut [1841].

AUVUNIKURṆAKA

Author of a *Sannipātakalikā.* Manuscripts:

N-W P I (1874) 118. 9ff. Property of Pūrṇānanda Jotishi of Benares.

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